

ARACHNIDA FROM BAJA CALIFORNIA AND OTHER PARTS OF MEXICO.

BY NATHAN BANKS.

PLATES XIII-XVII.

THE Arachnida, collected by Dr. Gustav Eisen and Frank H. Vaslit, under the auspices of the California Academy of Sciences, in Baja California and other parts of Mexico, were sent to the late Dr. Geo. Marx for determination and description. On the occasion of his death they were (with the exception of the Phalangida) sent to the writer. Dr. Marx had performed considerable mechanical work in the separation of the various species, and also some descriptive work. Part of the latter was so fragmentary as to be of no service; the descriptions which were completed, however, and which could be connected with the specimens, are incorporated in this article nearly as Dr. Marx wrote them, though in many cases there are slight changes or corrections. These species, of course, should bear Dr. Marx's name. Several of the species which he had described were not new, and so their descriptions are omitted. Anyone familiar with Dr. Marx's methods of work will not be surprised to learn that many of the specimens, when sent to me, bore no locality label whatever. Doubtless he knew where they came from, but left no clew that others might use. Some of the species were numbered, and by examining several of his series of numbers it was possible to find localities and his name for the species.

Dr. Marx (according to his notes) sent a number of specimens to the eminent French arachnologist, E. Simon. These M. Simon described in a paper entitled "Descriptions de quelques Arachnides de Basse-Californie faisant partie des collections du Dr. Geo. Marx," published in Bull. Soc. Zool. d. France, 1895. M. Simon also recorded and described some species from Baja California collected by

M. Diguët in a paper entitled " Sur les Arachnides recueillis en Basse-Californie par M. Diguët." In these two papers the following species are recorded which I have not recognized in this collection:

- Chorizomma pallens* SIM.
- Eurypelma steindachneri* AUSS.
- Lithyphantes fulvus* KEYS.
- Gasteracantha ellipsoides* WALCK.
- Misumena americana* KEYS.
- Thanatus rubicundus* KEYS.
- Selenops aissa* WALCK.
- Phidippus rimator* WALCK.
- Pardosa californica* KEYS.
- Mævia californica* PECK.
- Pæcilochroa concinna* SIM.

A few of these are, I believe, wrong determinations.

Previous to M. Simon's brief papers, nothing was known of the arachnid fauna of Baja California, nor of the west coast of Mexico; and great credit is due to the collectors, that amid the abundance of material in other groups they should have paused to gather such a collection of spiders as to place our knowledge of the arachnid fauna of this interesting region on a solid basis.

The collection may be roughly divided into two portions: that from the Cape Region of Baja California, and that from Tepic and other places on the mainland of Mexico. The collection from Tepic contains many species known from the southeastern part of the United States, yet with a considerable admixture of much more tropical forms. The spiders from the Cape Region of Baja California are more anomalous; they contain a larger percentage of truly tropical species, but yet such a number of forms connecting them to the fauna of the mainland that I did not think it necessary to treat this collection separate from that of Tepic. Guaymas, on the west coast, exhibits many affinities with the fauna of the Cape; while from Orizaba, in east Mexico, come a number of spiders well known in the Atlantic States.

Regarding the Cape fauna in particular, one will at once notice the occurrence of certain spiders of a truly tropical appearance. Such are *Artema atlanta*, a Pholcid found in houses throughout tropical America; *Heteropoda venatoria*, a large species common in the tropics of both hemispheres; species of *Selenops*; an *Hersilid*; two species of Caponidæ, curious two-eyed spiders; an *Oonopid*; several species of Epeiridæ, as *Cyrtophora fusiformis*, *Argiope argentata*, and *Gasteracantha hexacantha*; and various species in other families. One species, *Nephila hasselti*, was previously known only from the eastern part of Asia.

Of the peculiarities of this Cape fauna, one may call attention to the abundance of species of *Lithyphantes* and of *Habrocestum*, while the true *Theridiums* are not numerous, and there are no species of *Philodromus*. The Drassids are very numerous in species, though quite rare in specimens. One interesting feature of the collection was the large number of specimens of the curious Solpugids and certain Phrynidæ. These are so rare in collections that such an abundance of material fills one with wonder.

I have been able to identify but few species with those described by the Rev. O. P. Cambridge in the "Biologia Centrali-Americana." His spiders for the most part seem to come from quite different regions. Prof. Peckham has recently published a large paper on Central American Attidæ; but few of these are represented in this collection.

Altogether there are 315 species, 298 of which are true spiders, classed in 28 families. The Epeiridæ leads with a total of 50 species; then follow the Therididæ, Attidæ, and Lycosidæ. Seven families are represented with but one species. The types of new species are in the Academy.

Of the localities referred to the following are in the Cape Region of Baja California: Sierra San Lazaro, Sierra Laguna, Sierra San Nicolas, Agua Caliente, San Francisquito, Coral de Piedras, San José del Cabo, La Chuparosa, El Taste, La Palmilla, Las Palmas, Pescadero.

The following places are in Baja California north of the Cape Region: San Julio, Ensenada, Calmilla Mines, Santa Margarita Island, San Quintin, Magdalena Island.

Tepic, Orizaba, Mazatlan, Vera Cruz, Minititlan, Guaymas, Motzoronga Hermosillo, and San Miguel de Horcasitas are in Mexico, Guaymas, Hermosillo, and San Miguel de Horcasitas being in the Sonoran region.

THERAPHOSIDÆ.

1. *Eurypelma caniceps* *Sim.*—One female, probably this species, which was described from a male; Tepic, Oct.

2. *Eurypelma rusticum* *Sim.*—Several from San José del Cabo.

3. *Eurypelma helluo* *Sim.*—Two examples from Sonora.

4. *Pachylomerus pustulosus* *Becker.*—Several from San José del Cabo.

5. *Entychides dugesii* *Sim.*—One specimen from San José del Cabo.

6. *Evagrus mexicanus* *Auss.*—A number from Tepic, Oct. and Nov., and Sierra San Lazaro, Sept. In all specimens the maxillæ are pale on the inner margin. I doubt if *E. rubrigularis* is anything different.

FILISTATIDÆ.

7. *Filistata hibernalis* *Hentz.*—Many specimens; San José del Cabo, Sierra San Lazaro, Sept., San Miguel de Horcasitas, Guaymas, and Tepic.

PLECTREURIDÆ.

8. *Plectreurys castanea* *Sim.*—Several from San José del Cabo.

9. *Plectreurys bicolor*, sp. nov.

PLATE XIII, FIG. 9.

Length ♂ 7 mm. Cephalothorax and sternum rufous; mandibles more brownish; legs reddish yellow, brownish on apical half of femora; abdomen

uniform dark gray; young specimens have cephalothorax yellowish and abdomen paler gray. Cephalothorax nearly twice as long as wide, but little narrowed in front. Legs quite long; femora stout, I curved in ♂, as long as cephalothorax; in ♀ a little shorter; metatarsus I of ♂ with a projection at the tip bearing a black spine; metatarsus I nearly straight; tarsus curved in ♂; all legs hairy; several spines on the inner side of femur I near tip, five or six spines below on tibia I; mandibles stout, slightly pectinate. Posterior eye-row barely recurved, anterior row nearly straight; A. M. E. smaller than other eyes and less than their diameter apart; S. E. slightly separated; M. E. form a trapeze broader behind than long; P. M. E. a little more than diameter apart and closer to each other than to the S. E. Sternum and mouth-parts as in the other species. Abdomen once and a half as long as broad, rounded behind and in front, quite high and convex, thickly clothed with blackish hairs.

A few specimens from San José del Cabo and Sierra Laguna. It differs from *P. castanea* in color, in ♂ having a projection to tibia I; from *P. tristis* in the color, in straighter metatarsus I, and coiled tube of palp.

10. *Diguetia canites* McCook.

Segestria canites McCook, Am. Spiders and their Spinning Work, II, p. 133.

Two specimens of this remarkable spider from Sierra San Nicolas. It is known to me from Southern California and Southern Texas.

SCYTODIDÆ.

11. *Loxosceles rufescens* Duf.—Various specimens from Agua Caliente, San José del Cabo, La Chuparosa, and Sierra San Lazaro, Sept.

12. *Scytodes lineatipes* Tacz.—Two specimens from Magdalena Island.

13. *Scytodes bajula* Sim.?—Two specimens, probably this species, from Mazatlan.

14. *Scytodes fusca* Walck.—A few specimens from San José del Cabo, El Taste, and Hermosillo.

15. *Scytodes perfecta*, sp. nov.

PLATE XIII, FIG. 2.

Length ♀ 7 mm., ♂ 6 mm., ceph. 3.2 mm. long, femur I 4.2 mm. Cephalothorax pale yellow, marmorated with brown marks on the plan of *S. thoracica*, in some specimens the markings nearly obliterated; legs pale, without markings; sternum pale yellow; abdomen grayish, above two rows of five or six black spots, the basal pairs longer and somewhat connected, two or three smaller spots on each outer side. Cephalothorax moderately high, quite broad; M. E. touching, equal in size to other eyes; sternum once and a half longer than broad, truncate behind. Legs slender, in ♂ femora I are furnished each side with a row of short, stiff spines, in the ♀ clothed with fine hair. Abdomen subglobose, longer than broad, broadly rounded behind, clothed as also the cephalothorax with short bristly hairs. The ♂ palpus is short; tibia once and a third longer than broad; tarsus long, curved, slender, bulb large, tapering gradually to the long, straight tube, which projects much beyond the tarsus.

A few specimens from San José del Cabo and San Miguel de Horcasitas.

16. *Scytodes mexicanus*, sp. nov.

PLATE XIII, FIG. 1.

Length 8 mm., ceph. 3.8 mm. long, femur I 5 mm. Cephalothorax pale, marked with dark brown, a transverse mark in front on M. E.; behind is a median line to near middle of the cephalothorax, each side is a broader line connected to a spot around the S. E., and on the middle connected to a large broad stripe extending backward and curved toward the center behind and then away from it, giving off each side several paler bands forming a rough network on each side of the cephalothorax; a spot on mandibles; a line on outside of maxillæ; sternum pale, with brown spots around the edge and some in center; legs pale, small spot on base and large one on tips of coxæ; femora with median and apical rings and several irregular ones near base, a spot on under side of patellæ, three rings on the tibiæ besides the extreme base, and a spot and a line under the metatarsi; abdomen gray, blackish above near tip, showing a few narrow, pale chevrons; venter with a few scattered black spots. The cephalothorax moderately broad and high; M. E. barely touching, hardly as large as S. E.; legs slender, but not near as long as in *S. longipes*; sternum once and a third longer than broad, rounded behind; abdomen subglobose, longer than broad and pointed behind.

One specimen; Mexico City.

ÆCOBIIDÆ.

17. *Thalamia parietalis* Hentz.—One specimen, without locality.

HERSILIIDÆ.

18. *Tama mexicana* Cambr.

Hersilia mexicana CAMBR., Biol. Cent.-Am., Arach.-Aran., p, 107.

One immature specimen, probably from San José del Cabo.

OONOPIDÆ.

19. *Gamasomorpha rufa*, sp. nov.

PLATE XIII, FIG. 12.

Length 1.8 mm. Cephalothorax, sternum, and abdomen reddish, except the soft rim, which is yellowish; legs and palpi yellowish; the hard parts punctulate, and everywhere scantily clothed with moderately long hairs. Cephalothorax once and a third as long as broad, narrow in front, high in second third, convexly sloping to the clypeus which is very low, behind sloping at first concavely and steeply, then more gradually and convexly, no dorsal groove, S. E. equal, touching; P. M. E. larger, touching each other, and but slightly separated from the S. E.; posterior row distinctly recurved; maxillæ inclined over the short lip; sternum a little longer than broad, truncate between the hind coxæ. Legs short; femora thickened at base; tarsi much shorter than metatarsi, without spines, but quite hairy; coxæ subglobose. Abdomen oval, once and a half as long as broad, depressed, wholly covered above by a horny shield, and another below reaching from base to near the spinnerets; a horny semicircle at base of the spinnerets; a dark stripe each side near furrow.

Two examples; no locality.

CAPONIDÆ.

20. *Nops ovalis*, sp. nov.

PLATE XIII, FIG. 6.

Length ♀ 7.5 mm., ♂ 5 mm. Cephalothorax and sternum reddish yellow; legs, palpi, and mandibles paler; abdomen pale gray; spot surrounding the eyes black. Cephalothorax long, oval; head barely narrowed in front; eyes small, about their diameter apart; sternum once and a half as long as broad. Legs with fine, long hairs; anterior pairs short and stout; femora much thickened; tarsi about one-half as long as metatarsi, and not near as long as breadth of femur I; the metatarsi straight and not divided; the tarsi biarticulate.

A few specimens; San José del Cabo and Sierra San Lazaro, Sept.

21. *Nops sternalis*, sp. nov.

PLATE XIII, FIG. 5.

Length ♀ 5 mm. Cephalothorax, sternum, legs, palpi, and mandibles pale yellowish; eye-spot black; abdomen pale gray. The cephalothorax is nearly circular in outline; head much narrowed in front; eyes large, more than one-half their diameter apart; sternum barely longer than broad. Legs with many quite stiff bristles; anterior pairs slender, the femora barely thickened; metatarsus curved and divided beyond middle into seven or eight false joints; tarsus about one-third the length of metatarsus, and as long as breadth of femora I; divided into five or six false joints.

Two specimens from San José del Cabo.

DYSDERIDÆ.

22. *Ariadne mexicana*, sp. nov.

Length 10 mm., ceph. 4.2 mm. long, 2.4 mm. wide. The cephalothorax is shining chestnut brown, slightly darker in front; mandibles dark brown; legs yellow-brown, anterior pairs darker except at base; sternum yellow-brown, with faint darker spots each side; abdomen gray, darker above than beneath; everywhere clothed with fine hair. Very similar in structure to *A. bicolor*, but the cephalothorax and sternum more slender; the M. E. are round, touching, and much more than their diameter (farther than in *A. bicolor*) from the slightly larger S. E. The anterior femora are curved and have a spine on inner side as in *A. bicolor*; there are four pairs of spines under tibia I, six pairs under metatarsus I, the latter joint slightly curved, one spine under tibia III, none under tibia IV.

Two specimens; La Chuparosa.

PHOLCIDÆ.

23. *Artema atlantica* Walck.—San José del Cabo. Very common in the Cape Region of Baja California.

24. *Physocyclus cornutus*, sp. nov.

PLATE XIII, FIG. 41.

Length 6 mm. Cephalothorax pale, a large brown spot over center with dentate margins; eyes surrounded by black; on clypeus a brown stripe each side from group of S. E. to the mandibles; abdomen pale, with several irregular dark bands on each side; legs and sternum pale, with brown dots and brown rings at tips of the femora and bases and tips of tibiæ. Cephalothorax flat, without thoracic elevation in the ♀; mandibles of ♂ striated near base

on outside, on inside with many granules, carinated, the ridge extending forward in the form of a horn. Abdomen higher than long; epigynum similar to *P. globosus*; eyes as in *P. dugesi*. Male palpus with the femur clavate, patella very short, tibia convex above, tarsi with a long projection, nearly truncate at tip (not long and flexuous as in *P. dugesi*), an inner, broader, longer projection, rounded at tip, and a third much shorter; inside is an ovate bulb.

Two males and two females; Cape Region.

25. *Physocyclus globosus* Tacz.—Sierra San Lazaro. Quite common in Baja California.

26. *Physocyclus mexicanus*, sp. nov.

PLATE XIII, FIG. 40.

Length 4 mm. Cephalothorax pale yellowish, with brown spot above connected forward with the eyes, three spots on each side, clypeus fuscous; sternum and legs pale, brown rings at tips of femora and on patellæ and on bases and tips of tibiæ; tips of palpi fuscous; abdomen pale, with some dark spots on each side. Cephalothorax without thoracic elevation; eyes as in *P. globosus*; abdomen about as high as long, somewhat flattened above; epigynum much like *P. globosus*, but with the anterior processes much longer and curved.

One specimen; Tepic, Nov.

27. *Psilochorus minutus*, sp. nov.

PLATE XIII, FIG. 42.

Length 2 mm. Cephalothorax pale yellowish, with a brownish spot above extending forward to each group of S. E.; S. E. on black spots and a black band passing through A. M. E. connecting them, from this band extends forward down on the clypeus a slender, pointed, black mark; clypeus is infuscated; legs and sternum pale, pale brownish rings on tips of the femora and bases and tips of tibiæ; abdomen pale bluish gray, marked with darker bluish and many silvery spots; region of epigynum yellowish, a prominent dark spot on each side of venter behind the epigynum. Cephalothorax low and eye-region somewhat elevated; posterior eye-row slightly procurved; A. M. E. much smaller than other eyes; P. M. E. once and a half their diameter apart. Legs slender, femora thickened toward base, tarsi indistinctly divided; mandibles quite long and slender, a tooth in front over each fang; abdomen a little longer than high, somewhat globose; epigynum projecting conically, a curved transverse ridge; sternum very broad, broadly truncate behind.

One specimen; Sierra San Lazaro, Sept.

ZOROPSIDÆ.

28. *Zorocrates fuscus* *Sim.*—Two specimens from Orizaba.

29. *Zorocrates badius* *Sim.*—Several from La Chuparosa and San Francisquito.

30. *Zorocrates pictus* *Sim.*—Several from El Taste and Coral de Piedras.

ZODARIIDÆ.

31. *Homalyonchus selenopoides* *Marx.*—Quite a number of specimens, mostly immature; San José del Cabo, and Sierra San Lazaro, Sept.

PRODIDOMIDÆ.

32. *Zimiris pubescens*, sp. nov.

PLATE XIII, FIG. 3.

Length ♀ 3.8 mm. Cephalothorax, legs, and sternum pale yellowish; abdomen pale grayish; A. M. E. surrounded by a black spot. Cephalothorax nearly once and a half as long as broad, not much narrowed in front, low, dorsal groove short; clypeus narrow, clothed with some scattered black hairs; A. M. E. smaller than other eyes, distinctly separated from each other and from A. S. E.; S. E. touching; P. M. E. oval, touching each other and P. S. E.; mandibles quite large and stout, somewhat porrect and diverging, fang long and slender. Palpi and legs quite thickly clothed with long hairs; femora thickened; tarsus II as long as metatarsus; femur III with one spine above, a few under tibia and some at apex of metatarsus. Sternum oval, one-fourth longer than broad. Abdomen nearly twice as long as broad, clothed with short, gray hair; inferior spinnerets much larger but barely longer than superior pair, with a bundle of long tubules at tip arising a little in front of inferior pair. Epigynum of two small holes about their diameter apart, from which extends behind an outline like a comma, and in front an outline of an inverted comma.

One specimen, without locality.

33. *Zimiris griseus*, sp. nov.

PLATE XIII, FIG. 4.

Length 3.2 mm. (young). Cephalothorax, bases of femora, and abdomen gray; rest of legs and palpi yellowish; A. M. E. surrounded by a black spot.

Cephalothorax about one-fourth longer than broad, considerably narrowed in front, clothed with appressed hair, dorsal groove short; A. M. E. smaller than others, separated from each other by almost their diameter, not half so far from A. S. E.; S. E. touching; P. M. E. oval, touching P. S. E., but separated from each other by fully their transverse diameter; mandibles stout, slightly porrect, strongly diverging, a row of long hairs with curved tips on their superior margin; sternum but little longer than broad. Legs quite large and long; femur II about as long as the cephalothorax; tarsus plainly shorter than metatarsus (legs I and IV lacking), clothed with quite long hair. Abdomen depressed, short and broad, once and a third longer than broad; inferior spinnerets very much longer and larger than superior pair, with a long bundle of tubules at the tip, they arise from the venter, one-third the distance from tip to base.

One specimen; no locality.

DRASSIDÆ.

34. *Drassus singularis*, sp. nov.

PLATE XIII, FIG. 8.

Length 10 mm. Cephalothorax, mandibles, and sternum reddish brown, legs paler at base, darker toward the tips; abdomen brown above, paler at base and on venter. Cephalothorax moderately slender; posterior eye-row longer than the anterior row, slightly procurved; P. M. E. round, fully their diameter apart, hardly farther from the P. S. E.; A. M. E. large, nearly their diameter apart, very much closer to the smaller A. S. E.; sternum one and one-fourth times as long as broad, sides rounded. Abdomen one and two-thirds longer than broad, depressed. One spine under tips of tibiae I and II, two under bases of those metatarsi, many on hind legs, one above on tibia III; scopulas on anterior tarsi. The epigynum shows a cavity broader than long, anterior corner extending forward, and within on each posterior side is a deeper cavity.

One female; Mt. Orizaba.

35. *Drassus orizaba*, sp. nov.

PLATE XIII, FIG. 11.

Length 9 mm. Cephalothorax dark yellow-brown, darker in front; mandibles dark red-brown; legs bright reddish yellow; sternum and mouth-parts red-brown; abdomen light brownish. Cephalothorax rather slender; posterior eye-row nearly straight, plainly longer than anterior row; P. M. E. oval, less than half their diameter apart, more than their diameter from the P. S. E.; A. M. E. less than diameter apart, much closer to the equal A. S. E.; mandibles large and porrect; sternum one and one-fourth as long as broad, broad at base, tapering behind. Abdomen large, cylindrical, about twice as large as broad. Legs short, no spines under anterior pairs, many on

posterior ones, one above on tibia III. The epigynum shows a cavity longer than broad, anterior part almost wholly occupied by the broad septum, which is narrowed near the middle and with several fine teeth at tip.

One female; Mt. Orizaba.

36. *Drassodes perditus*, sp. nov.

PLATE XIII, FIG. 7.

Length ♂ 10 mm., ♀ 12 mm. Cephalothorax reddish brown, clothed with white pubescence; legs yellow, tips darker; sternum reddish; mandibles dark red-brown; abdomen gray, with a basal horny spot, reaching one-third of way to tip on dorsum, mostly clothed with black hair. Posterior eye-row slightly procurved, longer than the anterior row; P. M. E. round, nearly their diameter apart, plainly farther from the equal P. S. E.; the anterior row straight; A. M. E. larger, about one-half their diameter apart, much closer to the A. S. E.; lateral eyes separated by more than their diameter; sternum broad, sides rounded. Legs moderately long, three pairs of spines under anterior tibiae, one pair under base of anterior metatarsi; posterior pairs spined on all sides; scopulas on anterior legs to the bases of metatarsi. Abdomen rather depressed, about twice as long as broad. Tibia of male palpus about as long as broad, with a bifid projection on the outer tip, the inner branch short and stout, the outer longer and sickle-shaped; tarsus short, the bulb very large and long, quite simple, with a small pale portion at tip. The female is much like the male, but rather darker, and under tibiae I one spine at base, one at middle, and a pair at tip. Epigynum shows a simple triangular cavity, longer than broad, and deepest behind; two dark, curved marks in front.

Two males from Agua Caliente and a female from Mexico City.

37. *Leptodrassus* (?) *incertus*, sp. nov.

PLATE XIII, FIG. 10.

Length 7 mm. Cephalothorax red-brown in front, fading to pale yellowish behind; mandibles dark red-brown; sternum reddish; legs yellowish; abdomen uniform light gray. Cephalothorax once and a third as long as broad, broad in front; posterior eye-row nearly straight; P. M. E. round, nearly twice their diameter apart, about as far from the slightly larger P. S. E.; anterior row recurved; A. M. E. large, less than their diameter apart, closer to the smaller A. S. E. which almost touch the P. S. E.; mandibles very large, correct, convex, granulate above, three teeth in front of fang, five small ones behind; maxillae show no transverse furrow, but rather convex; lip nearly square; sternum one-fourth longer than broad, nearly as broad in front as in the middle. Legs rather slender, no spines above on the tibiae, five pairs below on tibia I, three pairs on tibia IV, two pairs under metatarsus I, three pairs under metatarsus IV; at tip of metatarsus IV is a bunch of black hair;

a dense fascicle of hair under the claws. Abdomen rather cylindrical; spinnerets short, close together. The epigynum shows two large dark spots and between them a narrow furrow open in front.

One female; San José del Cabo, Sept. It differs from the genus in having larger, more toothed mandibles, and shorter spinnerets.

38. *Prothesima grisea*, sp. nov.

PLATE XIII, FIG. 33.

Length 7 mm. Cephalothorax, mandibles, legs, and sternum pale reddish brown; the legs rather more yellowish; abdomen above and below dark gray. Cephalothorax rather broad, considerably narrowed in front; posterior eye-row straight; the P. M. E. oval, about one-half their diameter apart, rather farther from the equal P. S. E.; anterior eye-row about as long as the posterior one, procurved; A. M. E. scarcely their diameter apart, closer to the equal A. S. E.; sternum longer than broad, truncate in front, sides rounded. Legs rather short and stout, no spines under leg I, one under tibia II, and two under metatarsus II, many on hind pairs but not above on tibiae. Abdomen depressed, truncate at base, blunt pointed behind. The epigynum shows a rounded cavity with a triangular median extension in front.

One specimen; Cape Region.

39. *Prothesima peninsulana*, sp. nov.

PLATE XIII, FIG. 16.

Length 8 mm. Cephalothorax, mandibles, and sternum bright reddish brown; legs rather paler; abdomen blackish, paler below. Posterior eye-row straight, barely longer than anterior row; P. M. E. large, oval, almost touching, but little farther from the P. S. E.; anterior row procurved; A. M. E. about one-half their diameter apart, closer to the hardly larger A. S. E.; sternum oval. Abdomen once and a half longer than broad, truncate at base, depressed. Legs moderate, no spines under tibia and metatarsus I, but many short stiff bristles; many spines on hind legs. Epigynum shows a somewhat triangular cavity indented by two slender projections from behind.

One example; no locality except Baja California.

40. *Prothesima mexicana*, sp. nov.

PLATE XIII, FIG. 18.

Length 6–8 mm. Cephalothorax and mandibles reddish yellow; legs and sternum paler; abdomen red-brown above, paler beneath. Cephalothorax moderately slender, much narrowed in front; eyes close together; the posterior row slightly procurved; the P. M. E. somewhat oval, less than one-half

their diameter from each other, distinctly farther from the rather smaller P. S. E.; A. M. E. fully one-half their diameter apart and closer to the equal A. S. E.; sternum rather oval, tapering and pointed behind. Legs moderate; no spine under tibiae I, one under middle of tibiae II, two under base of metatarsi I and II; the posterior pairs with more spines, but none above on the tibiae. Abdomen subcylindrical, hardly depressed, nearly twice as long as broad. The epigynum shows a cavity somewhat triangular, with hardly rounded corners, and with a tooth on the superior side, divided by a septum, broadest near base, then gradually tapering toward tip, where it is somewhat enlarged.

Several examples from Orizaba, and Mt. Orizaba, Jan. A small specimen from Mexico City shows the epigynum rather broader, but of the same general character.

41. *Prothesima gentilis*, sp. nov.

PLATE XIII, FIG. 17.

Length 3.3 mm. Cephalothorax, mandibles, sternum, and legs dull yellowish; abdomen gray, mostly clothed with black hair, more prominent at the base of abdomen. Cephalothorax low, much narrowed in front, dorsal groove short; posterior eye-row straight; P. M. E. round, less than one-half their diameter apart, distinctly farther from the nearly equal P. S. E.; A. M. E. barely smaller, close together, not farther from the nearly equal A. S. E.; sternum once and a fourth longer than broad, sides rounded. Abdomen depressed, truncate at base. Legs short, apparently no spines under tibiae I and II, quite a number below and on sides of posterior pairs. The epigynum shows an angulated area longer than broad, narrowed in front, and divided by a dark line; behind are two dark oval bodies.

One specimen from La Chuparosa.

42. *Prothesima fidelis*, sp. nov.

PLATE XIII, FIG. 19.

Length 3.6 mm. Cephalothorax, mandibles, sternum, and legs dull yellowish; anterior patellae and tibiae darker above; abdomen dark gray above, lighter beneath, clothed with black hair rather more thickly than in *P. gentilis*. Cephalothorax low, quite slender, dorsal groove short; posterior eye-row straight, about as long as the anterior row; P. M. E. round, close together, a little farther from the equal P. S. E.; A. M. E. close together and as close to the equal A. S. E.; sternum oval, rather broader than in *P. gentilis*. Abdomen depressed, truncate at base, broadly rounded behind. Legs short, no spines below anterior tibiae, a few on the metatarsus; posterior pairs numerously spined; weak scopulas on anterior tarsi. The epigynum shows a nearly square area bounded, except behind, by a black ridge and divided by two median lines; behind on each side is a dark opening on the margin of an obscure mark.

One female from Minititlan, Feb. 3, 1892. (Bruner coll.). Closely related to *P. gentilis*, but separated by shape of epigynum, and darker anterior tibiæ and patellæ.

43. *Prothesima atra* Hentz.—Three specimens from the Cape Region of Baja California. They are not so black as eastern specimens, but as dark as those from Washington State. The epigynum is a large opening, narrowed behind, but not sufficient to consider as a distinct species, but rather a geographical race.

44. *Prothesima directa*, sp. nov.

PLATE XIII, FIG. 21.

Length 7.5 mm. Cephalothorax shining yellowish; legs and sternum similar; mandibles more reddish; abdomen pale grayish, with four impressed dark dots above, and a basal, horny shield reaching half way to the middle of dorsum. Cephalothorax moderately slender; posterior eye-row slightly procurved; P. M. E. hardly round, scarcely their diameter apart, and about as far from the equal P. S. E.; anterior row straight or barely recurved; A. M. E. large, less than their diameter apart, and not so far from the A. S. E.; mandibles scarcely porrect; sternum once and a third longer than broad, narrowed in front and behind. Legs moderately long; three pairs of spines under the anterior tibiæ, and one pair under the base of anterior metatarsi; posterior pairs numerous spined; anterior tarsi with fine scopulas. Abdomen hardly depressed, twice as long as wide; spinnerets long, the superior pair two-thirds as long as inferior pair. The δ palpus has the tibia a little longer than broad, and a slender spine-like projection at the outer tip, the bulb long and quite simple, at the end a pale part with a fine short tip.

One δ from La Chuparosa. Related to *P. valida* Bks., from California, but readily separated by having a straight (instead of curved) projection at tip of the tibia of δ palpus.

45. *Prothesima completa*, sp. nov.

PLATE XIII, FIG. 22.

Length 7 mm. Cephalothorax yellowish; legs similar, paler at base; mandibles and sternum more reddish; abdomen paler grayish; clothed with black hair, most prominent at the base of abdomen, a horny shield at base, but hardly extending upon the dorsum. Posterior eye-row nearly straight; the P. M. E. slightly oval, hardly one-half their diameter apart, a little further from the equal P. S. E.; A. M. E. smaller, nearly their diameter apart and much closer to the A. S. E.; mandibles scarcely porrect; sternum oval, rather

broad in front; abdomen slightly depressed, twice as long as wide. Legs quite long, no spines under tibia or metatarsus I, one under tibia II, three under metatarsus II; posterior pairs numerous spined; scopulas very thin and scanty. Tibia of ♂ palpus about as long as broad, with a large, stout projection at outer tip; tarsus short, the bulb large, but little modified and with a short, stout black tube at the tip. The ♀ resembles the ♂; abdomen broader, no horny spot at base, and no spine under tibia II. The epigynum shows a triangular opening with the corners rounded, and behind two round dark marks.

A male from La Chuparosa and the female from San José del Cabo. Readily separated from *P. directa* by shape of ♂ palpus and less spiny anterior legs.

46. *Prothesima indecisa*, sp. nov.

PLATE XIII, FIG. 20.

Length 7 mm. Cephalothorax, legs, mandibles, and sternum yellow-brown; abdomen dark gray, paler below, with a triangular horny shield at base. The cephalothorax is considerably narrowed in front; the posterior eye-row straight; P. M. E. round, less than their diameter apart, about that distance from the equal P. S. E.; A. M. E. about their diameter apart, much closer to the rather larger A. S. E.; sternum but little longer than broad, sides rounded. Legs short, no spines under the anterior tibiae, one under metatarsus II, many on the posterior legs; coxae of first legs considerably longer than the others. Abdomen once and two-thirds as long as broad, truncate at base. The ♂ palpus has the tibia about as broad as long, with a straight, stout projection at outer tip; the bulb is quite large and shows a curved tube at the tip.

One male from San Miguel de Horcasitas.

47. *Megamyrmeleon californicum* Sim.

PLATE XIII, FIG. 25.

Several specimens from Sierra San Lazaro, Sept., and from La Chuparosa.

48. *Cesonia trivittata*, sp. nov.

PLATE XIII, FIG. 23.

Length 5 mm. Cephalothorax pale yellowish, with a black stripe each side, and a black seam; legs, sternum, and mandibles pale yellowish; abdomen whitish, with three black stripes above, one on each side reaching to the spinnerets, and one in the middle usually ending before the tip, but in one young specimen connected at tip with the side stripes; venter with two indistinct dark stripes. Cephalothorax slender; posterior eye-row about straight;

P. M. E. separated by once and a half their diameter, less than diameter from P. S. E.; anterior row rather recurved; A. M. E. hardly their diameter apart and closer to the rather smaller A. S. E. Legs short, a spine under patella I, three or four under tibia I, and one under base of metatarsus I; posterior legs more thickly spined. Sternum once and a fourth longer than broad, tapering in front and behind. Abdomen once and three-fourths longer than broad, truncate at base; spinnerets very long. The epigynum shows only a nearly circular cavity, and the outline of two bodies toward the front and a line each side.

A few specimens from Sierra San Lazaro, Sept. It is readily separated from *C. bivittatus* Hentz. by the three stripes on abdomen, its smaller size, and by its more slender body.

49. *Cesonia mexicana*, sp. nov.

PLATE XIII, FIG. 24.

Length ♂ 6 mm. Cephalothorax dark brownish, with a narrow median white stripe, and a stripe each side; legs yellowish brown, tinged with blackish; sternum and mandibles brown; abdomen white above, with a black stripe each side and a broader one in the middle, all reaching to the tip; venter brownish; mostly clothed with black hair. Cephalothorax quite broad, much narrowed in front; eyes about as in preceding species; sternum very broad and rounded; abdomen narrow, a long horny shield at base. Legs of moderate length, three pairs of spines under tibia I, one under base of metatarsus I, posterior pairs thickly spined; tibia of ♂ palpus short, with a long slender slightly curved projection at the outer tip; tarsus short, with a long, dark, simple bulb and beyond a small pale portion. The ♀ is 7 mm. long, agrees with ♂ in color and markings, has no horny shield at base of abdomen which is broader. The epigynum shows two holes about their diameter apart.

Male from Mt. Orizaba; female from Tepic, Nov. It is distinguishable from *C. bivittatus* Hentz. by its three stripes on abdomen, by darker color, and by the more curved projection to tibia of ♂ palpus. It differs from the preceding species principally in broader cephalothorax, larger size, darker color, and shape of epigynum.

50. *Gnaphosa decepta*, sp. nov.

PLATE XIII, FIG. 14.

Length ♀ 7 mm. Cephalothorax, legs, and sternum bright yellowish brown, the former with some blackish marks around the dorsal groove, and the tarsi of anterior legs and tips of palpi rather red-brown; mouth-parts red-brown;

abdomen uniform dark gray above and below. Cephalothorax rather short and broad; posterior eye-row slightly recurved; P. M. E. oval, less than one-half their diameter apart, fully their diameter from the P. S. E.; A. M. E. hardly their diameter apart, much closer to the equal A. S. E.; sternum nearly oval. Abdomen hardly depressed, twice as long as wide, truncate at base, and with prominent hairs. Legs of moderate length, no spines under tibiae I and II, one under base of those metatarsi, three pairs under tibia IV.

One specimen from Tepic, Nov., looks like a *Prosthesima*; related to *G. sericata* (*bicolor* Hentz.), but separated by larger and closer P. M. E. and slightly different epigynum.

51. *Gnaphosa distincta*, sp. nov.

PLATE XIII, FIG. 13.

Length 7-9 mm. Cephalothorax yellowish brown, sometimes more blackish, showing the usual marks; legs paler; sternum more reddish; abdomen dark gray, sprinkled with many black dots, most numerous toward tip. Cephalothorax rather broad, quite narrow in front, posterior eye-row strongly recurved; P. M. E. hardly their diameter apart, twice as far from the larger P. S. E.; the anterior row nearly straight; A. M. E. about their diameter apart, much closer to the slightly larger A. S. E.; sternum but little longer than broad, broadly truncate in front, sides rounded. Legs short, one pair of spines under tibia I at tip, two pairs under metatarsus I; posterior pairs with many spines, and one above on tibia III. Abdomen once and a half longer than broad, depressed, truncate at base. Epigynum shows two converging bodies in front of which is a short pear-shaped body.

Several examples; San José del Cabo and Sierra San Lazaro, Sept.

52. *Gnaphosa* (?) *abnormis*, sp. nov.

PLATE XIII, FIG. 15.

Length 10 mm. Cephalothorax, legs, mandibles, and sternum uniform dark red-brown; legs paler at tip; cephalothorax somewhat shining; abdomen light brown above and below. Cephalothorax rather slender, narrowed in front, dorsal groove quite long; mandibles with a plate behind and a striate portion in front of fang; posterior eye-row a little longer than anterior row, barely recurved; P. M. E. round, hardly their diameter apart, farther from the equal P. S. E.; A. M. E. small, about their diameter apart and closer to the very much larger A. S. E.; sternum once and a fourth longer than broad. Legs of moderate length, no spines under tibiae and metatarsi of anterior pairs; a number on posterior pairs; short, rather scanty scopulas on anterior tarsi and metatarsi. The epigynum shows a long, slender, central piece and behind two rounded humps near together.

One female; Cape Region. By the plate on mandibles it goes in the section *Gnaphosæ*, but it scarcely agrees with any genus in that section, differing in the nearly straight posterior eye-row and in the A. S. E., larger than the A. M. E.; it has not the appearance of a *Gnaphosa*.

CLUBIONIDÆ.

53. *Anyphæna futilis*, sp. nov.

PLATE XIII, FIG. 31.

Length ♀ 7 mm., ♂ 5 mm. Cephalothorax yellowish, with indications of a darker stripe each side; eyes on black spots; mandibles dark red-brown; sternum and legs pale yellowish, little darker at tips and a band on the tip of hind tibia; abdomen yellowish, with two brownish stripes above, converging at the tip. Cephalothorax short and broad; posterior eye-row procurved; P. M. E. once and a half their diameter apart, rather closer to the equal P. S. E.; anterior row shorter, nearly straight, not much smaller than the posterior eyes; A. M. E. less than their diameter apart, closer to the nearly equal A. S. E.; mandibles long, strongly porrect, slightly divergent; sternum narrowly oval. Legs rather long with many spines, none above on tibia I; tibia plus patella I about equal to the same joints of leg IV; metatarsus IV, however, much longer than that of I in the ♀, in ♂ shorter. Abdomen nearly twice as long as broad, furrow much nearer to epigynum than to spinnerets. Epigynum shows a large cavity, much broader than long, bordered by red. The ♂ palpus has the tibia twice as long as broad, with a long, slender, black projection on the outer tip; the tube is long and slender, the point lying in a furrow near the tip of the tarsus; a long, slender piece curved around the palpal organ, and a pale transverse area at base.

Two specimens and young; San José del Cabo and Sierra San Lazaro.

54. *Gayenna orizaba*, sp. nov.

PLATE XIII, FIG. 37.

Length ♀ 7 mm. Cephalothorax, mandibles, and legs yellowish, eyes on black spots; sternum pale; abdomen pale with many fuscous dots, rather more numerous behind. Cephalothorax short; the posterior eye-row straight or slightly procurved; P. M. E. much more than their diameter apart, hardly as far from the equal P. S. E.; anterior eyes smaller, close together; A. M. E. smaller than A. S. E.; mandibles vertical; sternum oval. Legs short, all spined; tibia plus patella I plainly longer than those joints of leg IV. Abdomen large, once and a half longer than broad, furrow nearer to the spinnerets than to the epigynum. Epigynum shows two small holes about their diameter

apart, and two oblong, dark spots in front, and a dark central spot before these.

One female; Mt. Orizaba.

55. *Gayenna ignava*, sp. nov.

PLATE XIII, FIG. 34.

Length 5.5 mm. Cephalothorax and mandibles dull yellowish; eyes on black spots; legs and sternum paler; abdomen gray, indistinctly mottled. The cephalothorax is short, considerably narrowed in front; posterior eye-row nearly straight; P. M. E. fully their diameter apart, rather closer to the P. S. E.; anterior row shorter, eye smaller, nearly equal and close together; mandibles hardly porrect; sternum narrowly oval. Legs moderately long, with long spines; tibia plus patella I shorter than those joints of leg IV. Abdomen once and two-thirds longer than broad, furrow about half way between spinnerets and epigynum. The latter shows a cavity longer than broad, narrowed behind, and containing two lobes in front.

One female; no locality.

56. *Gayenna minuta*, sp. nov.

PLATE XIII, FIG. 32.

Length ♀ 3.6 mm. Cephalothorax pale yellowish, with faint traces of darker stripes, slightly blackened around eye region; eyes on black spots; mandibles black; legs, sternum, and abdomen whitish, the latter rather yellowish on each side above toward the tip. Cephalothorax about as long as tibia plus patella I; P. M. E. once and a half their diameter apart, plainly closer to the equal P. S. E.; anterior eyes smaller; A. M. E. about their diameter apart, rather closer to the larger A. S. E. Legs rather short, with scattered spines; tibia plus patella I about equal to tibia plus patella IV; sternum once and a half longer than broad, tapering in front and behind. Abdomen nearly twice as long as broad, rounded in front, pointed at tip; ventral furrow half way between epigynum and spinnerets. Epigynum shows a dark curved mark each side behind, and in front each side an elliptical hole bordered with dark.

One female; Tepic, Oct.

57. *Chiracanthium parvulum*, sp. nov.

PLATE XIII, FIG. 36.

Length ♂ 2.7 mm. Cephalothorax, mandibles, and sternum pale yellowish; abdomen and legs whitish. Posterior eye-row procurved; P. M. E. once and a half their diameter apart, rather closer to the slightly smaller P. S. E.;

anterior row straight; A. M. E. about diameter apart, closer to the equal A. S. E.; mandibles quite large and stout, scarcely porrect. Legs long, with long spines; first pair longest; hind femora rather stout. Abdomen narrow and cylindrical; ♂ palpus very large; tibia curved, with a large projection on the outer side from near the base, trifold at tip.

One male; Sierra San Lazaro, Sept. Its small size and the trifold projection to the tibia of palpus separate it from the allied *C. albens* Hentz.

58. *Chiracanthium inclusa* Hentz.—Several specimens from San José del Cabo, and Tepic, Oct.

59. *Trachelas parvulus*, sp. nov.

PLATE XIII, FIG. 28.

Length 4.5 mm. Cephalothorax, mandibles, and sternum dark red-brown; legs all pale yellowish; abdomen dark brown, paler beneath. Cephalothorax and sternum rugulose; posterior eye-row but slightly recurved; the P. M. E. round, hardly their diameter apart and about as far from the equal P. S. E.; anterior row a little shorter, straight; A. M. E. equal to the P. M. E., a little less than their diameter apart, much closer to the equal A. S. E.; mandibles not porrect; sternum once and a third longer than broad, truncate at base. Legs slender, clothed with fine hair, no spines. Abdomen once and a half longer than broad, rounded at base, pointed at tip. The epigynum shows a cavity much broader than long, in each hind corner a darker spot, and two long dark bodies are outlined in front.

One female; no locality. Readily separated from *T. speciosa* by its smaller size, much shorter and straighter posterior eye-row, and different epigynum, as well as the pale front legs.

60. *Trachelas speciosa*, sp. nov.

PLATE XIV, FIG. 32.

Length 5.5 to 8.5 mm. Cephalothorax, mandibles, and sternum dark red-brown; anterior pair of legs reddish, others pale yellowish; abdomen dark gray or brownish, four red-brown impressions above. Cephalothorax, mandibles, and sternum finely rugulose; head broad; posterior eye-row strongly recurved; P. M. E. round, once and two-thirds their diameter apart, more than twice their diameter from the equal P. S. E.; anterior row much shorter, nearly straight; A. M. E. equal to P. M. E., about their diameter apart, much closer to the equal A. S. E.; mandibles very stout, slightly porrect; sternum once and a half longer than broad, truncate in front, sides rounded. First pair of legs stout, all clothed with fine hair, no spines. Abdomen once

and a half longer than broad, rounded at base, pointed behind. The epigynum shows two dark cavities separated by a narrow septum, and behind two pale cavities, in front are outlined two dark bodies. The δ palpus is similar to that of *T. tranquilla* Hentz., but the bulb is longer.

Several specimens; Magdalena Island and El Taste. A young one is pale colored on the thorax and front legs, like allied species.

61. *Trachelas mexicana*, sp. nov.

PLATE XIII, FIG. 27.

Length 8 mm. Cephalothorax, mandibles, and sternum bright red-brown; first legs rather paler, others yellowish; abdomen gray, darker toward the tip. Cephalothorax and sternum finely rugulose like *T. tranquilla*; posterior eye-row strongly recurved; P. M. E. about once and a half their diameter apart (two and a half times in *T. tranquilla*), more than twice their diameter from the equal P. S. E.; A. M. E. less than their diameter apart, rather closer to the A. S. E.; mandibles large, not so prominent as in *T. tranquilla*; legs with fine hairs, no spines; sternum like that of *T. tranquilla*; and abdomen as in that species. The epigynum shows two holes as in that species, but the corneous area extends further forward.

One female from Tepic, Oct. Closely related to *T. tranquilla*, but light cephalothorax, smaller size, and position of posterior eyes proclaim it distinct.

62. *Clubiona complicata*, sp. nov.

PLATE XIII, FIG. 39.

Length of ceph. 5 mm., broad in middle 4.4 mm., front 2 mm.; tibia plus patella 16 mm. Cephalothorax, legs, mandibles, and sternum pale yellowish; legs more reddish on the metatarsi; abdomen pale gray above and below. Cephalothorax rather broad and low; posterior eye-row straight, about equal in size; the P. M. E. their diameter apart, more than twice as far from the P. S. E.; eyes of anterior row at about equal distances; the A. M. E. smaller and scarcely their diameter apart; legs large and long, two spines above on all tibiae, six pairs below on tibia I; sternum a little longer than broad, concave in front, sides rounded; abdomen small and short; patella of δ palpus as long as the tibia, the latter with a large forked projection on the outer side, the outer branch of which is curved and bifid at tip.

One male from San José del Cabo.

63. *Syspira tigrina* Sim.—Several specimens; San José del Cabo, Mazatlan, and Hermosillo.

64. *Syspira longipes* *Sim.*.—A few specimens, about 10 mm. long, from San José del Cabo, seem to be this species.

65. *Corinna peninsulana*, sp. nov.

PLATE XIII, FIG. 26.

Length 6 mm.; ceph. 3 mm. long, broad 2.4 mm.; tibia plus patella IV 3.6 mm. Cephalothorax red-brown, almost black in the eye-region; mandibles dark red-brown; sternum red-brown; legs reddish or yellowish brown; abdomen dark gray or blackish, darkest above; cephalothorax clothed with fine short white hair. Cephalothorax rather broad, broad in front, surface, especially forward, finely granulate; anterior eye-row nearly straight; A. M. E. very large, less than one-half their diameter apart, a little farther from the slightly smaller A. S. E.; posterior eye-row barely procurved; P. M. E. small, nearly twice their diameter apart, and about as far from the equal P. S. E.; mandibles large, prominent, geniculate, granulate in front, fang long and stout; sternum very broad, nearly as broad as long, sides rounded, truncate in front. Legs moderately long and slender, with many fine short hairs and a few spines, one above on tibia IV, four pairs under tibia I, besides a short pair at tip, two pairs under metatarsus I. Abdomen slender and short, subcylindric, in δ with a horny shield at base reaching above to near middle of dorsum.

A few specimens; San José del Cabo.

66. *Thargalia venusta*, sp. nov.

PLATE XIII, FIG. 35.

Length 7.5 mm.; tibia plus patella IV 3.5 mm. The cephalothorax and sternum are yellowish-red, rather blackish on the posterior sides of former; mandibles red-brown, with an elongate pale spot on the tip; anterior legs wholly pale yellowish, posterior pair darker, no bands; abdomen black, with a white band across the base, continued down upon the sides, behind a red stripe giving off, before the middle, a projection each side, which is connected to the white mark on the sides; the red stripe is terminated by a white circular mark reaching upward from the tip of abdomen. Anterior eye-row about straight; the A. M. E. nearly their diameter apart, much closer to the A. S. E.; posterior row procurved; the P. M. E. nearly once and a half their diameter apart, closer to the equal P. S. E.; sternum plainly longer than broad, truncate in front. Legs clothed with black hair; tibia plus patella IV a little longer than cephalothorax. Abdomen nearly twice as long as broad. The epigynum shows two oval cavities, more than their diameter apart.

One specimen; San Miguel. A very pretty species.

67. *Thargalia dorsata*, sp. nov.

PLATE XIII, FIG. 30.

Length 9-10 mm.; tibia plus patella IV 4 mm. Cephalothorax, sternum, and femora black, the former clothed with white plumose hairs; all tarsi and tibiae and metatarsi of anterior pairs pale, posterior tibiae and metatarsi red-brown; mandibles black, with an elongate pale spot in front near the tip; abdomen black, a small white spot at base followed by a broad red stripe, truncate before tip, sometimes on posterior part, with serrate border, on each lower side reaching forward from spinnerets is a white stripe or row of spots. Anterior eye-row nearly straight; A. M. E. about their diameter apart, much closer to the equal A. S. E.; posterior row procurved; P. M. E. nearly once and a half their diameter apart, closer to equal P. S. E. Legs very spiny, tibia plus patella IV a little longer than cephalothorax; sternum broad in front, but little longer than broad; abdomen large and broad; epigynum shows two large depressions much less than their diameter apart. The ♂ is more reddish than the ♀, and with the abdomen almost covered above with red.

Several specimens from San José del Cabo, Sierra San Nicolas, and Sierra San Lazaro, Sept. This species is close to the true *T. crocatus* Hentz., but has the sternum broader in front, the epigynum different, the red stripe above terminates farther from the tip, and there is white on the lower sides.

68. *Thargalia mexicana*, sp. nov.

PLATE XIII, FIG. 38.

Length 9 mm.; tibia plus patella IV 3.8 mm. The cephalothorax, femora, and sternum are red-brown, the former thickly clothed with white hair, also some on the femora, other joints of anterior legs pale yellowish, of hind pairs reddish, paler on tips of joints; mandibles red-brown, with a pale spot on the tips; abdomen dark brown, a red-brown horny shield at base extending over the basal fourth of the dorsum, clothed above with black hairs and white bands, one at base, a broader one just beyond, another before middle, and one before tip. Cephalothorax rather slender; P. M. E. a little more than their diameter apart, rather closer to the equal P. S. E.; A. M. E. less than their diameter apart, much closer to the equal A. S. E.; sternum nearly oval, not broad. Abdomen nearly twice as long as broad, punctulate above, a small, horny shield on venter just before the spinnerets. Legs with black, simple hairs and white plumose ones; tibia plus patella IV hardly as long as the cephalothorax; one spine above on tip of tibia IV.

One female; Tepic, Oct.

69. *Thargalia gracilis*, sp. nov.

PLATE XIII, FIG. 29.

Length 6.5 mm.; tibia plus patella IV 3 mm. Cephalothorax, sternum, and femora black, the former clothed with scattered white hairs, rest of anterior legs and last joints of palpi pale yellowish; posterior legs darker, the tibiae and metatarsi with black lines, coxae rather reddish; mandibles black, with pale spots at the tips; abdomen black, with red-brown horny shield at base extending over the basal fourth of the dorsum, some white hairs at base, and probably a band across the middle. Anterior eye-row nearly straight; A. M. E. hardly their diameter apart, closer to the A. S. E.; posterior row procurved; P. M. E. fully their diameter apart, closer to the equal P. S. E.; dorsal groove short; sternum rather broad, oval. Abdomen twice as long as wide, hardly constricted in the middle, a horny piece on venter just before the spinnerets. Tibia plus patella IV scarcely longer than the cephalothorax; a spine above on tip of tibia IV.

One female; no locality.

70. *Hypsinotus mexicanus*, sp. nov.

PLATE XVI, FIG. 18.

Length 10-12 mm. Cephalothorax dark red-brown, almost black in front and on the mandibles; sternum bright red-brown; legs pale yellow-brown; abdomen brown, rather paler below. Cephalothorax shining, broad, shorter than tibia plus patella I, high behind the eye-region; dorsal groove and furrows distinct; posterior eye-row procurved, P. M. E. about once and a fourth their diameter apart, and as far from the equal P. S. E.; anterior row straight; A. M. E. hardly one-half their diameter apart, about as far from the smaller A. S. E., which are about as far from the equal P. S. E.; mandibles large and prominent; sternum scarcely longer than broad. Legs quite long, having three or four pairs of spines under tibia I and II, two pairs under these metatarsi, no spines above on posterior tibiae. Epigynum shows a circular depression open behind, surrounded by a dark red-brown, horny area. Tibia of ♂ palpus has a large process with two smaller processes at the tip.

Several specimens; Tepic, Oct. and Nov.

71. *Hypsinotus testaceus*, sp. nov.

PLATE XVI, FIG. 17.

Length 7 mm. Cephalothorax reddish brown, testaceous behind; mandibles nearly black; sternum bright red-brown; legs pale yellow-brown; abdomen testaceous. Cephalothorax hardly shining, finely granulate, convex, broad, about as long as tibia plus patella I; dorsal groove and furrows distinct; posterior eye-row procurved; P. M. E. fully once and a third their diameter apart, rather farther from the equal P. S. E.; A. M. E. much larger,

one-half their diameter apart, closer to the smaller A. S. E.; the mandibles large and prominent. Legs not very long, hairy, six pairs of spines under the anterior tibiæ, and two pairs under these metatarsi, two above on the hind tibia; sternum hardly longer than broad; tibia of δ palpus has above two processes at the tip, the upper one much broader than the other.

One male; Tepic, Oct.

AGALENIDÆ.

72. *Tegenaria derhami* Scop.—One female; La Chuparosa.

73. *Tegenaria californica* Banks.—Several specimens; without locality.

74. *Tegenaria modesta*, sp. nov.

PLATE XIV, FIG. 21.

Length 8.5 mm.; femur I 5 mm. Cephalothorax dull yellowish, indistinctly mottled with dark, seam black; eyes on black spots; legs yellowish, with indistinct darker bands; mandibles reddish; sternum brown, paler in front; abdomen gray, above and on sides with a net-work of dark lines; venter with a white line each side. Cephalothorax not very long; posterior eye-row slightly procurved; lower row straight; P. M. E. their diameter apart, farther from the P. S. E.; A. M. E. smaller. Legs long and slender, femur I much longer than cephalothorax; sternum as broad as long, narrowly prolonged between the hind coxæ. Apical joint of the superior spinnerets shorter than the basal joint. The epigynum shows a shield-shaped cavity in front, a long median line behind ending in a small transverse cavity.

One specimen; without locality.

75. *Tegenaria obscura*, sp. nov.

PLATE XIV, FIG. 26.

Length 6.5 mm.; femur I 3 mm. Cephalothorax yellowish, with two indistinct dark stripes, seam black; eyes on black spots; legs yellowish, indistinctly banded; mandibles reddish; sternum blackish, with a pale central line and spots on the side; abdomen thickly covered with blackish marks, leaving in front a pale spear-mark, and on each side two pale oblique spots; venter rather paler. Cephalothorax rather slender; posterior eye-row slightly procurved; anterior row straight; P. M. E. about their diameter apart, farther from the equal P. S. E.; A. M. E. smaller. Legs rather short, femur I about as long as the cephalothorax; sternum longer than broad, pointed between

the hind coxæ. Apical joint of the superior spinnerets slender, rather longer than basal joint. Epigynum shows a transverse, rounded cavity nearly filled by a broad, rounded plate.

One example; San Miguel de Horcasitas.

76. *Agalena pacifica* Banks.—One male; no locality.

77. *Agalena peninsulana*, sp. nov.

PLATE XIV, FIG. 22.

Length ♀ 7-9 mm. Cephalothorax yellowish, with brown stripe each side and a black marginal seam; the mandibles more reddish; legs yellowish, with black bands and spots; abdomen brown, with a median yellowish stripe, dentate behind and margined with black; spinnerets reddish; venter gray; sternum dark, with a pale central stripe and side-spots. P. M. E. about once their diameter apart, full as far from the P. S. E. Last joint of the superior spinnerets rather longer than the basal joint, but not as long as in *A. californica*. The epigynum consists of a cavity broader than long, divided by a triangular septum, widest behind.

Three specimens from La Chuparosa. It differs from *A. californica* in the epigynum, spinnerets, and markings of the sternum.

78. *Agalena orizaba*, sp. nov.

PLATE XIV, FIG. 30.

Length ♀ 9 mm. Cephalothorax and legs rather reddish yellow, faint traces of marks on the former; abdomen grayish, rather uniformly finely netted with brown and a pale stripe above, dentate behind and margined with blackish spots; spinnerets pale; venter brownish; sternum yellow-brown; mandibles red-brown. P. M. E. less than diameter apart, as far from the P. S. E. Last joint of the superior spinnerets shorter than the basal one. The epigynum has a transverse bridge somewhat like that of *A. nævia*, at end of which there is a black mark.

One female; Mt. Orizaba.

79. *Cœlotes exaptus*, sp. nov.

PLATE XIV, FIG. 27.

Length ♀ 8-10 mm. Cephalothorax reddish, darker on the head and on the mandibles; sternum reddish; legs rather paler, uniform; abdomen above and below pale grayish. Cephalothorax rather short, a little shorter than

tibia plus patellæ I; A. M. E. hardly their diameter apart, rather larger than the A. S. E.; P. M. E. much smaller, about three times their diameter apart and farther from the larger P. S. E.; mandibles strongly geniculate; sternum scarcely longer than broad, somewhat narrowed in front. Legs moderate, five pairs of spines under tibia I, two pairs under metatarsi I, two above on tibia IV. Epigynum shows a transverse, rounded corneous plate, emarginate in front, and two dark cavities behind.

Three specimens; San Francisquito and El Taste.

DICTYNIDÆ.

80. *Amaurobius peninsulanus*, sp. nov.

PLATE XIV, FIG. 23.

Length ♀ 10 mm., ♂ 8.5 mm. Cephalothorax reddish, blackish around eye-region; mandibles dark red-brown; legs and sternum yellowish; abdomen brownish, darker above; the ♂ shows a pale spot at base. P. M. E. about two and a half times their diameter apart, much farther from the P. S. E.; mandibles large, prominent at base. Legs rather short, much longer in the ♂, especially the first pair; three pairs of spines under the tibia I in ♀, more numerous in ♂. The epigynum shows an elevated part each side, separated by a smaller and shorter middle piece. The tibia of the ♂ palpus has two large projections, one spreading with a sharp point, the other erect and blunt at tip. Two smaller projections just below the insertion of the tarsus, the latter is short and curved, with a large palpal organ.

Male and female from San José del Cabo.

81. *Dictyna avara*, sp. nov.

PLATE XIV, FIG. 19.

Length 5 mm. Cephalothorax dark red-brown, darkest near the eye-region; mandibles same color; sternum brownish; legs paler, more yellowish, except the anterior femora, which are almost red-brown, covered with white and black hairs; abdomen whitish, sparsely clothed with blackish hair, forming a faint, irregular, central folium, and a stripe each side. Cephalothorax rather broad. Abdomen very large, once and a half longer than broad. Epigynum has the inner outline of the anterior cavities continuous with the posterior ones.

One female; no locality.

82. *Dictyna sublata* *Hentz.*—Three specimens from San José del Cabo.

83. *Dictyna miniata*, sp. nov.

PLATE XIV, FIG. 25.

Length ♂ 3.6 mm. Cephalothorax pale reddish, paler behind; eyes on dark spots; mandibles reddish; legs and sternum yellowish; abdomen gray, darker above, with traces of pale chevrons. Pars cephalica high, much narrower in front; mandibles long, bowed, concave, faintly granulate; legs long and slender, with black hairs, first pair much the largest; sternum nearly as broad as long, scarcely narrowed in front; abdomen about twice as long as broad, pointed behind; palpi stout; tibia very short and with a short tooth above; tarsus slender with a long process around it bearing the style.

One male; Guaymas.

84. *Dictyna texana* Banks. — Two specimens from Tepic.

85. *Dictyna*, sp.? One specimen, no locality, with a manuscript name by Dr. Marx, but it is not adult so I shall not venture to describe it. It has a light marginal stripe on the cephalothorax.

86. *Altella polita*, sp. nov.

PLATE XIV, FIG. 20.

Length 4.5 mm. Cephalothorax and mandibles reddish, blackish around the eyes; sternum rather yellowish brown; legs similar, except the patellæ which are paler; abdomen dark gray above, with two rows of pale spots in the posterior part, below lighter gray. Cephalothorax rather low, but little elevated in the pars cephalica; anterior eye-row straight; A. M. E. smaller than A. S. E., scarcely their diameter apart; posterior row slightly procurved; P. M. E. once and a half their diameter apart, as far from the equal P. S. E.; mandibles geniculate at the base; sternum plainly longer than broad, sides rounded, pointed behind. Legs rather short, with many hairs, one spine below on metatarsus I and II, three below near tip of tibia III, one at middle and two at the tip of tibia IV, several on the posterior metatarsi. Abdomen twice as long as broad, rounded at base, scarcely pointed at the tip, slightly depressed. The epigynum shows each side a dark curved mark, and in front a pale round opening.

One female; no locality. The genus differs from *Dictyna* in having spines on the legs, and in the smaller A. M. E.

ULOBORIDÆ.

87. *Uloborus plumipes* *Luc.*—One specimen from Tepic looks very much like the Texan example of this species, very much darkened all over; the metatarsus I pale; tibia and femur I black.

88. *Uloborus formosus* *Marx ms.*

PLATE XIV, FIG. 31.

Female 5 mm. long.

Cephal. long 1.5, broad in front .8, broad in middle 1.3.

Abdomen long 4, broad 2.2, high at the hunches 2.5.

Femur I 2.5, pat.+tibia 2.6, metat. 2, tars. 1.1

II 1.5	1.5	1.1	.7
--------	-----	-----	----

III 1.2	1.1	.8	.8
---------	-----	----	----

IV 2.	2.	1.2	1.
-------	----	-----	----

Cephalothorax brown, with a short but broad, light grayish middle line over the posterior part of pars cephalica, and two oval dots at the thoracic part. Mandibles brownish yellow; maxillæ blackish brown; labium black, with a white tip; sternum blackish brown with dense black hairs; coxæ light grayish white, with a black spot in the center. Legs, 1st pair, femur brownish, infuscated, with a whitish ring just beyond the middle; patella infuscated; tibia infuscated, with a white ring at the base and near the distal end; metatarsus and tarsus dark infuscated toward the end; 2nd leg, femur light grayish white, with three dark rings, one at the base, the other near middle, and the third at tip; tibia with a band at middle and one at tip; metatarsus and tarsus of the same ground color and infuscated at tips; legs 3 and 4 of the same color and markings as leg 2, only the metatarsi with a ring near middle and one at tip. Abdomen, dorsal surface gray with a whitish center, which is interrupted by a dark gray middle line, which reaches over the basal half; the sides blackish; and at the under side behind the fold white with a square black spot, with two longitudinal white lines near the sides, and behind this with black diverging lines which run toward the black spinnerets.

Cephalothorax slightly longer than broad; the mouth-parts similar to those in the other species; sternum narrow and long; abdomen elevated by a protuberance which gives the dorsum an angular aspect.

One female; Orizaba.

89. *Uloborus diversus* *Marx ms.*

PLATE XV, FIG. 17.

Cephal. long 1.5, broad in middle 1.2, broad in front .6 mm.

Abdomen long 4, thick at the hunch 2.5.

Femur I 2., pat.+tibia 2., meta. 1.7, tarsus .6

II 1.2	1.2	.7	.5
--------	-----	----	----

III 1.	.8	.6	.5
--------	----	----	----

IV 1.3	1.5	1.	.7
--------	-----	----	----

Cephalothorax dark brown, covered with a rather long, reddish brown pubescence, and especially at the sides, behind pars cephalica with white hairs, in the posterior part at base with a triangular yellow spot. Mandibles and maxillæ brownish yellow, the latter at the inner sides pale; labium at base yellowish, whitish at tip; sternum yellowish brown with a black border. Legs 1st pair, femur and patella dark brown, the other joints light yellow, with the distal end dark infuscated, apical half of metatarsus deep black, sometimes a pale spot on femur beyond the middle; 2nd pair, femur dark brown, with a yellow ring near tip; patella dark brown; tibia and metatarsus light yellow, with a broad brown band at the end, and a narrow brown ring near the middle; tarsus light yellow, the distal end dark brown; 3rd and 4th pairs of legs, the femur yellowish, with the distal end dark infuscated and a dark ring close behind; tibia and metatarsus as femur, and tarsus light yellow, with the tip darkened. Abdomen grayish, with four white dots, a short basal longitudinal middle line and the sides darkened.

Cephalothorax nearly as broad as long, flattened; both eye-rows recurved, the four M. E. form a trapeze which is higher than broad posteriorly; mandibles long, robust, parallel, and vertical, claw weak; maxillæ broad at tips, narrow at base, truncate in front; labium narrower at base than in middle, pointed at tip; sternum long and narrow, covered with white scaly hairs; abdomen triangular; i. e., elevated at the first third by two hunches, drawn out at blunt tubercles, which give the dorsal surface a geniculated appearance.

Three specimens from Guaymas.

90. *Uloborus albineus* Marx ms.

PLATE XV, FIG. 18.

Female, long 4.2 mm.

Cephax. long 1.5, broad in middle 1.3; broad in front .6.

Abdomen 3.5, thick at the hunches 3.

Femur I 2, pat. and tibia 2. metat. 2. tarsus 1.

II 1.4 1.4 1. .5.

III 1. 1. .6 .5.

IV 1.6 2. 1.2 1.

Cephalothorax pale brownish yellow, pars cephalica covered with reddish brown hairs, which run over the whole dorsal surface, with the exception of a white margin at the sides; two black lines obliquely running from the base over the post-thorax, inclosing a pale yellowish triangular spot; mandibles and maxillæ brownish yellow, the latter with the inner margin white; labium at base yellow, at tip white; sternum brownish yellow, with black, long, stiff hairs. Legs pale yellowish, with pale brownish rings; only the distal half of metatarsus I is deep black. Abdomen white, with a long irregular blackish spot on the middle line behind the two hunches, hardly reaching to the apex.

Cephalothorax nearly as broad as long; both eye-rows recurved, the anterior M. E. by their diameter separated from each other, and larger than the S. E.; the four M. E. form a trapeze, broader than long, narrower in front; the anterior S. E. more separated from the anterior M. E. than they are themselves; mandibles, in front highly arched, parallel, vertical; maxillæ narrow

at base and broader in front, where they are truncate; labium longer than half the length of maxillæ, pointed very sharp at the tip. Abdomen very much geniculate on the dorsal surface by the two hunches and tubercles, nearly triangular; spinnerets long.

Two specimens from Hermosillo.

THERIDIIDÆ.

91. *Theridium tepidariorum* Koch.—Two specimens from Hermosillo, and one from Cape Region. Appears to be more uncommon in the tropics than in the temperate regions.

92. *Theridium fordum* Keys.—Various specimens; Mt. Orizaba, Sierra San Lazaro, and Tepic. Also known to me from Texas. Closely related to the preceding species, but easily distinguished by its dotted legs.

93. *Theridium studiosum* Hentz.—Two examples from Tepic.

94. *Theridium spirale* Em.—Two from Tepic.

95. *Theridium frondeum* Hentz.—One young specimen from Tepic.

96. *Theridium rufipes* Lucas.

Theridium albonotatum Tacz., Horæ Soc. Entom., Ross., T. X., p. 1.

Two specimens; Tepic.

97. *Theridium rupicola* Em.—Two from Cape Region.

98. *Theridium confraternus*, sp. nov.

PLATE XIV, FIG. II.

Very similar to *T. unimaculatum* Em., but no black spot on the cephalothorax. The legs are infuscated beyond the femora, and the femora have

a blackish stripe in front and behind. The legs are not as stout as in *T. unimaculatum*, the anterior femora being very much more slender. Length 1.8 mm.

One example from Tepic, Oct.

99. *Theridium elevatum* Bks.—One specimen from Tepic. Known from central Texas.

100. *Theridula triangularis* Keys.—Four from Tepic, Oct.

101. *Argyroides americanus* Tacz.

Argyroides larvatus KEYS, Die Spinn. Amer., Therid., p. 197.

Two examples from Tepic, Nov.

102. *Euryopsis funebre* Hentz.—One from Sierra San Nicolas.

103. *Spintharus flavidus* Hentz.—A young specimen from Baja California, without further locality given.

104. *Lathrodectes mactans* Koch.—Several from San Miguel de Horcasitas, San José del Cabo, Tepic, Minititlan, and Orizaba.

105. *Chrysso splendida*, sp. nov.

PLATE XIV, FIG. 13.

Length 7.2 mm., femur I 10 mm. long. Cephalothorax whitish, blackish on the margin. Legs pale yellowish, base of femora with elongate black spots, black bands at middle and near tip of femora and tibiæ (except tibia III which has a band at base and tip), and on tip of patellæ and metatarsi; tips of palpi reddish; mouth-parts pale; sternum black, abdomen greenish gray, with a row of elongate clear yellow spots on each side, and some lower down near the spinnerets, a black tip to the projection, black spots near spinnerets, and a large black spot at base of venter. Cephalothorax low, moderately slender; eyes about equal in size; M. E. form a square; the P. M. E. not quite their diameter apart; mandibles quite stout, vertical; sternum longer than broad, sides rounded. Legs long and slender, femur I longer than body; metatarsus longer than tibia, clothed with long pale hairs, which at tips

of joints are denser, stouter, and black. Abdomen somewhat triangular, in side view, elevated and pointed behind, hardly compressed; region of epigynum swollen.

Two females; Tepic, Oct.

106. *Teutana grossa* Koch.—One specimen; San Miguel de Horcasitas. Determined by Dr. Marx.

107. *Teutana zonata* Keys.—One from Minititlan.

108. *Lithyphantes pulcher* Keys.

PLATE XIV, FIGS. 7 AND 8.

Not uncommon; San José del Cabo, Sierra San Lazaro, Sept., Sierra San Nicolas, Tepic, Oct. It varies quite a little in amount of coloration.

109. *Lithyphantes parvula* Marx ms.

PLATE XIV, FIG. I.

Length ♀ 3.8 mm. Cephalothorax, the mouth-parts, and the sternum dark yellowish testaceous; eye-area somewhat infuscated. Legs of the same color, with the distal ends of the joints infuscated. Abdomen yellowish white, with six dark gray spots in two longitudinal rows over the dorsum, a similar colored transverse spot in front of these rows near the base. At the somewhat darker underside, the area between the fold and the spinnerets covered by a whitish, indistinct spot.

Cephalothorax nearly as broad as long, anteriorly less than one-half as broad as in the middle; posterior eye-row slightly recurved; M. E. closer together; anterior row recurved; four M. E. form an oblong which is higher than broad, and broader in front. Mandibles vertical, parallel; maxillæ inclined over the labium, which is about as long as broad, and pointed at the tip. Abdomen reaching high over the cephalothorax, broad, oval; legs 4, 1, 2, 3.

Male, slightly smaller; cephalothorax pale yellow testaceous; mouth-parts more brownish yellow, and the sternum yellowish brown, bordered with a brown line; the eye-area somewhat infuscated. Legs pale yellow, but also slightly infuscated at the distal ends of the joints. Abdomen whitish with four pair of dark brownish spots in two longitudinal rows, the first and second pair connected by a narrow purplish transverse line; the underside purplish brown with a spot in the center.

Cephalothorax one-fourth longer than broad, anteriorly one-third as broad as in the middle; posterior eye-row straight; M. E. slightly closer together;

anterior row recurved; four M. E. form an oblong which is higher than broad, and wider in front; mouth-parts as in the female; abdomen narrow oval.

Three specimens; San José del Cabo.

110. *Lithyphantes punctulata* Marx ms.

PLATE XIV, FIG. 4.

Cephalothorax 2 mm. long; abdomen 3 mm. long; leg I 7.6 mm. Cephalothorax and mouth-parts reddish brown, the maxillæ and labium with white tips; abdomen black, covered with dense hairs, with a narrow white line around the base, and with five pairs of white spots in two lines over the dorsum, outside of these lines three short transverse spots, the largest between the second and third dorsal spots; underside brownish, with two white spots in the center, one behind the fold, the other before the spinnerets; the sides with three pairs of white dots. Legs reddish brown, anterior femora and tips of tibiæ usually darker.

Cephalothorax as long as tibia I, slightly longer than broad, pars cephalica nearly half as wide as cephalothorax in the middle. Mandibles parallel, vertical; maxillæ inclined over the labium, truncate at tips; labium broader than long, rounded at tip. Posterior eye-row slightly procurved, eyes equidistant; anterior eye-row recurved, four M. E. form a quadrangle longer than broad; abdomen oval.

Four examples from Las Palmas.

111. *Lithyphantes venusta* Marx ms.

PLATE XIV, FIG. 2.

Ceph. 2 mm. long; abdomen 3 mm. long. Cephalothorax yellowish testaceous, eye-area somewhat infuscated; mandible, maxillæ, and labium of the same color, the two latter with white margins at their tips; sternum brownish yellow. Abdomen mottled with purple and brownish spots, with a broad, white transverse band over the base, and a white, longitudinal, narrow, middle band (from the middle to the apex), with serrated margins over the posterior half, and on each side a white spot about at the middle region from the lateral sides to the dorsal surface, and which continues to the brownish underside, an indistinct white spot between the fold and the spinnerets, legs yellowish testaceous.

Cephalothorax one-fourth longer than broad, as long as femur I. Posterior eye-row slightly recurved, equidistant; anterior much recurved; four M. E. form an oblong which is somewhat broader in front. Abdomen oval; with flattened dorsum. Legs 1, 4, 2, 3.

One specimen from San Francisco.

[Perhaps a variety of *L. pulcher* N. B.]

112. *Lithyphantes transversus*, sp. nov.

PLATE XIV, FIG. 5.

Length 4 mm. Cephalothorax, mouth-parts, sternum, and legs reddish, the latter slightly darker on the femora, one specimen is more suffused with fuscous; abdomen fuscous, above a broad basal transverse band, a middle chevron behind two pairs of small spots, and an apical band, silvery; venter with some basal spots, and two interrupted bands before the spinnerets, silvery. Cephalothorax moderately narrow, plainly longer than femur I; posterior row of eyes straight; P. M. E. less than diameter apart; M. E. form a quadrangle longer than broad. Legs short. Abdomen nearly truncate at base, nearly once and a half as long as broad, broadly rounded behind, slightly depressed and quite thickly clothed with black hair. The femora plainly shorter than in *L. pulcher*.

Two specimens; Sierra Laguna, El Taste.

113. *Lithyphantes medialis*, sp. nov.

PLATE XIV, FIG. 3.

Length 4-4.5 mm. Cephalothorax, legs, mouth-parts, and sternum wholly reddish yellow; abdomen fuscous or black, with a narrow basal curved band, a median row of four spots, the basal the largest, a lateral row of three spots and an apical band, silvery; venter paler than dorsum; a spot behind the epigynum, one in front of the spinnerets, and two each side, silvery. Cephalothorax moderately narrow, depressed; posterior eye-row nearly straight, P. M. E. almost their diameter apart; M. E. form a quadrangle higher than broad. Legs quite long; femur I much longer than the cephalothorax. Abdomen less than once and a half as long as broad, broadly rounded at base, more pointed behind, quite convex above, not very hairy.

Several specimens from San José del Cabo, and Sierra San Lazaro, Sept.

114. *Lithyphantes autumnalis*, sp. nov.

PLATE XIV, FIG. 6.

Length 3.9 mm. Cephalothorax dark reddish brown; legs more yellowish, with fuscous bands at ends of femora, patellæ, tibiæ, and metatarsi; sternum fuscous; abdomen fuscous, above a narrow curved basal band, two small spots, and four or five other bands behind, connected on sides and sometimes in the middle, forming a median stripe, all silvery; venter fuscous, with a spot behind the epigynum and two elongate spots each side near the spinnerets. Cephalothorax quite broad, more so than in allied forms, depressed; posterior eye-row barely recurved; P. M. E. less than their diameter apart. Legs

moderate; femur I about as long as the cephalothorax. Abdomen one and one fourth times as long as broad, broadly rounded in front and behind, quite high, quite thickly clothed with not very prominent hair. Epigynum not distinct.

Two specimens; Tepic, Oct.

115. *Ceratinopsis rosea*, sp. nov.

PLATE XIV, FIG. 15.

Length 1.5 mm. Cephalothorax and mandibles reddish; eyes on black spots; sternum a little darker; legs and palpi yellowish; abdomen dirty white, showing behind some paler narrow chevrons, grayish on venter. Cephalothorax gradually rising to eye-region; head not broadened; A. M. E. smaller than the other eyes, at least their diameter apart; posterior row of eyes straight, more than their diameter apart, about as far from S. E., the latter not raised on tubercles as in some species; mandibles quite large, two transverse ridges on the inner side of their front; sternum as broad as long, truncate between the hind coxæ, sides rounded. Legs short; femur I shorter than cephalothorax, moderately hairy, but without spines. Abdomen ovate, quite hairy; palpus black, has a strong hook on the tibia, which has a tooth above.

One male from San Francisquito, Sierra Laguna.

116. *Grammonota gentilis*, sp. nov.

PLATE XIV, FIG. 24.

Length ♀ 3.8 mm. Cephalothorax and mandibles light red-brown; sternum paler; legs dirty yellowish; abdomen pale grayish, with a black central stripe, and an incomplete lateral stripe, these are connected behind; venter with two indistinct dark lines. Cephalothorax quite broad, but slightly higher in the eye-region; A. M. E. small, close together; posterior row slightly procurved; P. M. E. about their diameter apart, farther from the S. E.; mandibles stout, with a row of large teeth each side of the fang. Legs short, quite stout; femur I much shorter than the cephalothorax, a spine above on middle of tibiæ and on tip of patellæ; all clothed with stiff bristles; sternum about as broad as long, pointed between hind coxæ, undulate on sides. Abdomen more than once and a half as long as broad, rounded in front, pointed behind.

One female; El Taste.

117. *Grammonota* (?) *nigriceps*, sp. nov.

PLATE XIV, FIG. 16.

Length 2.4 mm. Cephalothorax and legs pale yellowish; eye-region blackish; mandibles brownish; sternum yellowish; abdomen uniform gray.

The cephalothorax is quite slender, low, and considerably narrowed in front; eyes large and close together; posterior eye-row procurved; P. M. E. much less than their diameter apart, and barely further from the S. E.; A. M. E. smaller, nearly touching, quadrangle of M. E. higher than broad. Legs quite slender; femur I a little shorter than the cephalothorax, clothed with stiff bristles, one spine above on tibiae and one on tip of patellae; sternum a trifle longer than broad, sides rounded, tip barely produced between the hind coxae. Abdomen once and a half longer than broad, base rounded, apex pointed.

One female; Tepic, Nov. Possibly not this genus.

118. *Acartauchenius insanus*, sp. nov.

PLATE XIV, FIG. 12.

Length ♀ 3 mm., ♂ 2.4 mm. Cephalothorax, legs, and sternum pale yellowish, former and latter margined with blackish; abdomen whitish, with black median stripe, connected behind to a broader lateral one; a narrow line on each side of the venter, and blackish around the spinnerets. Cephalothorax considerably narrowed in front, highest at dorsal groove, higher in ♂ than ♀, sloping to the swollen clypeus; posterior eye-row strongly procurved; anterior row slightly recurved; A. M. E. smaller than other eyes, and touching; S. E. touching; P. M. E. a little more than their diameter apart; behind the P. M. E. in the ♂ there is a patch of stiff bristles; sternum barely longer than broad, sides rounded, pointed between the hind coxae. Abdomen more than once and a half as long as broad, moderately convex above and pointed behind. Legs short; femur I shorter than the cephalothorax; under tibiae I and II two rows of spines, one above on all tibiae and patellae; these are very long in the ♀ but short in the ♂.

Several specimens; San Miguel de Horcasitas.

119. *Tmeticus tridentatus*, Em.

Erigone dentimandibula KEYS (?), Die Spinn. Amer., Therid., p. 168.

One male from Tepic.

120. *Tmeticus incertus*, sp. nov.

PLATE XIV, FIG. 28.

Length ♀ 2.2 mm. Cephalothorax dull yellowish brown; legs paler yellowish; mandibles more reddish; sternum blackish; abdomen dark gray, darker on the venter, above with two large indistinct pale spots, and above the spinnerets a few narrow chevrons. Cephalothorax not very broad, not much

narrowed in front; posterior eye-row slightly recurved; P. M. E. less than their diameter apart, about as far from the S. E.; A. M. E. much smaller, slightly separated, quadrangle of M. E. higher than broad; no claw at tip of palpus. Legs moderate; femur I about as long as the cephalothorax, clothed with stiff bristles, and above on tibiae I, II, and III, two spines, only one seen on tibia IV; metatarsus I shorter than tibia I. Lower anterior border of mandibles with three or four small teeth; sternum slightly longer than broad, narrowly truncate between the hind coxae, sides rounded. Abdomen once and one-fourth longer than broad, base rounded, apex pointed, moderately convex above. Epigynum has two horny divaricate processes.

One female; Tepic, Nov.

121. *Tmeticus denticulatus*, sp. nov.

PLATE XIV, FIG. 29.

Length ♀ 2.5 mm. Cephalothorax yellowish brown, blackish on the seam; eyes on black spots; the mandibles more reddish; legs and palpi pale yellowish; sternum blackish; abdomen black, a few pale narrow chevrons above the spinnerets. Cephalothorax nearly once and a half as long as broad, not much narrowed in front; posterior eye-row about straight; P. M. E. their diameter apart, and about as far from the S. E.; A. M. E. a little smaller than other eyes, less than their diameter apart; quadrangle of M. E. as high as broad; no claw to tip of palpus; anterior lower border of mandibles with five quite prominent teeth; sternum a little longer than broad, truncate and deflexed between the hind coxae, sides rounded. Legs not very long; femur I shorter than the cephalothorax; metatarsus I barely shorter than tibia I; all with bristles; a spine on all patellae, two on tibiae I, II, and III, only one seen on tibia IV above. Abdomen oval, once and one-fourth longer than broad, higher than usual, almost subglobose.

Two examples; Tepic, Nov.

122. *Pocobletus mexicanus*, sp. nov.

PLATE XIV, FIG. 18.

Length ♀ 2.8 mm. Cephalothorax and legs pale yellow brown, a black seam on former; mandibles brighter than cephalothorax; sternum more blackish; abdomen dark grayish or blackish, darkest on venter, no pale marks, except a few narrow chevrons just above the spinnerets. Cephalothorax broad, much narrowed in front; posterior eye-row about straight; P. M. E. nearly their diameter apart, scarcely so far from the S. E.; A. M. E. much smaller, and half their diameter apart; quadrangle of M. E. about as broad behind as long; mandibles moderate, with two or three small teeth on lower

anterior margin. Legs quite large and long, quite thickly clothed with stiff bristles; metatarsus I shorter than tibia I; femur I plainly longer than the cephalothorax; sternum barely longer than broad; sides undulate; truncate and deflexed between hind coxæ; a large and prominent claw to tip of palpus. Abdomen quite large and high, somewhat globose, clothed with stiff bristles.

Two females; Tepic, Nov., and Agua Caliente.

123. *Linyphia phrygiana* Koch.—Three examples from San José del Cabo.

124. *Linyphia communis* Hentz.—Several specimens from Hermosillo.

125. *Linyphia litigiosa* Keys.—One from San José del Cabo.

126. *Linyphia eiseni* Marx ms.

PLATE XIV, FIG. 10.

Length ceph. 2 mm.; abdomen 3 mm. Cephalothorax olive-yellow, with a broad brownish marginal band around the thoracic part, pars cephalica with a dark brownish line on its sides, and over the eye-area infuscated; mandibles, maxillæ, labium, and sternum olive yellowish brown; legs of the same color, with dark rings at the distal ends and around the middle of the joints. Abdomen pale olive-yellow, with a blackish brown lance-shaped spot from the base to the end of the first third, five or more transverse bands from each side to near the venter, where they do not quite touch each other, the first reaching the lance-shaped spot at its broadest part, the sides with irregular blackish spots; underside blackish with two lighter colored lines.

Cephalothorax one-quarter longer than broad; mandibles long, parallel and vertical; maxillæ slightly inclined over the labium, which is about as broad as it is long and truncate at tip; posterior eye-row straight, eyes equidistant, anterior row recurved; the M. E. smaller, the four M. E. form a quadrangle which is narrower in front and higher than broad. Abdomen about twice as long as broad. Legs long, with some spines; the upper spinnerets two-jointed.

One female; Magdalena Island.

127. *Linyphia dorsalis*, sp. nov.

PLATE XIV, FIG. 9.

Length ♂ 2.5 mm. Cephalothorax, legs, mandibles, and sternum all pale yellow, the former with a black dorsal stripe; abdomen gray on the sides,

white above, and with a broad median reddish stripe. Legs and abdomen clothed with long black hairs. Cephalothorax low, quite slender; P. M. E. more than their diameter apart, a little closer to S. E.; A. M. E. as large as P. S. E., and about their diameter apart; mandibles quite long, vertical. Legs quite short; femur I much stouter than other pairs, and a little longer than cephalothorax, all with many slender spines; sternum longer than broad, pointed behind. Abdomen a little less than twice as long as wide, base truncate, apex broadly rounded. The palpus has a slender, nearly straight tube extending from near base to tip, a quite strong curved hook at base; tibia slightly prolonged on the inner side.

One male; no locality.

128. *Floronia adstricta* K^{ey}s.?—One female, probably this species, which was described from a male from Utah.

129. *Bathyphantes transversus*, sp. nov.

PLATE XIV, FIG. 14.

Length 2 mm. Cephalothorax yellow-brown, darker on margin; eyes on black spots; legs yellowish, an indistinct dark spot near base of femur, and indistinct dark bands near middle and tip of tibia; sternum yellowish. Abdomen whitish, with four or five transverse black bands, and the apex black; venter darker, with a black stripe each side and over middle of base. Cephalothorax broad, depressed; head broad; posterior eye-row procurved; P. M. E. less than their diameter apart; sternum as broad as long, blunt-pointed between hind coxae, sides rounded. Legs slender; femur I as long as the cephalothorax, hairy, and with a few scattered spines. Abdomen about twice as long as broad, truncate at base, pointed behind. Palpus large, the tarsus is swollen above, the tube is coiled once around on top of the bulb, the hook is not very prominent.

One male; La Chuparosa.

130. *Bathyphantes formica* Em.—One female; El Taste.

131. *Bathyphantes tragica* Marx ms.

PLATE XIV, FIG. 17.

Length ♀ 2.3 mm. Cephalothorax light olive brown, with a darker, indistinct and often interrupted marginal band, pars cephalica small, with a dark brown V-shaped spot at its posterior angle, from the eyes of the posterior row dark lines extend to this V-shaped spot; mandibles olive brown; maxillae dark olive brown, with the inner half white; labium dark olive brown, with a white line at tip; sternum dark olive brown. Abdomen gray, with a blackish

longitudinal stripe over the anterior region, followed by four blackish, triangular spots, the sides speckled with blackish spots; the underside pale, with some darker lines. Legs olive brown, with infuscated distal regions to the joints. Cephalothorax a little longer than broad, anteriorly one-half as wide as in the middle; posterior eye-row straight; eyes equidistant; anterior row recurved; A. M. E. closer together; four M. E. form a quadrangle higher than broad, and narrower in front; abdomen pyriform, tapering toward the apex. Legs long and slender; mandibles long, straight, parallel, and vertical; maxillæ separated, not longer than broad, more than twice as long as the labium, which is about twice as broad as long. Male similar to the female, but the cephalothorax and legs paler, yellowish, and the markings on the abdomen less distinct.

Two specimens; Guaymas, May, and San Miguel de Horcasitas.

TETRAGNATHIDÆ.

132. *Tetragnatha mandibulata* Walck.—San José del Cabo and Tepic, Nov. The ♀ has a tooth on the fang at base.

133. *Tetragnatha grallator* Hentz.—Sierra Laguna and San José del Cabo. Those from the latter place are smaller but appear to be the same species. The eyes are farther apart than in our northern specimens, but like those from Texas.

134. *Tetragnatha peninsulana*, sp. nov.

PLATE XV, FIG. 12.

Length ♂ 7.5 to 9 mm.; femur I 8.1 mm. long. Mandibles as long as the cephalothorax, more porrect than usual, very pale, the large tooth above is placed almost at extreme tip, and the one on inner margin is moved forward; tibia of palpus once and one-third longer than patella. Length ♀ 10 mm., femur I 7.2 mm.; abdomen 2 mm. wide. Mandibles nearly four-fifths as long as cephalothorax, no tooth on outside of fang, which is wavy. Abdomen cylindrical, scarcely enlarged at base; cephalothorax pale yellowish, sometimes with blackish marks; abdomen with a folium above, below there is a black stripe margined with silvery. The S. E. are farther apart than in the other species, but hardly as far as the M. E.; they are often connected by a blackish line.

Two males and several females; San José del Cabo.

135. *Tetragnatha fraterna*, sp. nov.

PLATE XV, FIG. 11.

Length ♂ 9.5 mm. long; femur I 8.5 mm. long. Mandibles about as long as the cephalothorax, yellowish, a small tooth between the large one above and the margin, fang long and wavy; tibia of palpus a little longer than patella. Length ♀ 10 mm.; femur I 8 mm. long; abdomen 2 mm. wide. Cephalothorax yellowish, with blackish marks; abdomen with a folium above, and a black median stripe below. Mandibles less than two-thirds as long as cephalothorax; fang short, evenly curved, scarce a trace of a tooth on outside at base. Abdomen nearly cylindrical, rather larger at base. Eyes of posterior row at equal distances; A. S. E. very much smaller than P. S. E., which they touch. Two ♀ with a large abdomen at base are closely related, but are perhaps different.

One male and several females; San José del Cabo. It has shorter mandibles than *T. grillator*, a more slender body, and the ♀ fang not curved.

136. *Tetragnatha convexa*, sp. nov.

PLATE XV, FIG. 10.

Length ♂ 10 mm.; femur I 12 mm. Mandibles almost as long as the cephalothorax, yellowish, apical half convex on outer side, no tooth between large one above and the inner margin; tibia of palpus once and a half as long as patella. Length ♀ 13 mm.; femur I 11 mm. long. Cephalothorax yellowish, with some faint dark marks; abdomen with a distinct folium above, a narrow silvery stripe each side on venter; sternum dark. Mandibles three-fourths as long as cephalothorax, much more convex (seen from the side) than usual, a prominent tooth on outer side of fang at base, and a large black one over the base of fang. Abdomen 3.1 mm. broad, enlarged at base. The A. S. E. hardly smaller than the P. S. E.; the P. M. E. rather closer to each other than to the P. S. E.

Several specimens; San José del Cabo.

137. *Tetragnatha intermedia*, sp. nov.

PLATE XV, FIG. 14.

Length ♂ 8.5 mm.; femur I 8.5 mm. long. Mandibles four-fifths as long as the cephalothorax, yellowish, fang long, rather wavy; tibia of palpus short, but little longer than patella. Cephalothorax yellowish, marked with blackish; sternum yellowish; abdomen dark, cylindrical. Eyes of posterior row about equally distant; A. S. E. smaller than P. S. E.

It has much resemblance to a small *T. grallator*, but has shorter mandibles, and there is a tooth between the large one above and the inner margin (which is not seen in *T. grallator*).

Three males; Tepic, Nov., and a few young ones.

138. *Tetragnatha atriceps*, sp. nov.

PLATE XV, FIG. 13.

Length ♂ 7 mm.; femur I 6.5 mm. long. Mandibles three-fourths as long as the cephalothorax, dark red brown, almost black, stout, outer margin rather sinuous, large tooth above, another almost as large nearer to inner margin, the long one on inner margin more erect than in other species; fang short, evenly curved; tibia of palpus much longer than patella, which is very short, whole palpus short; P. M. E. rather far apart. Cephalothorax yellowish; sternum pale; abdomen gray-brown, dotted with silvery, slender, cylindrical; head infuscated.

One male; El Taste. Easily known by its dark mandibles and the two large teeth above.

139. *Eugnatha pallida* Banks.—Male and female from Tepic, Oct.

140. *Eugnatha orizaba*, sp. nov.

PLATE XV, FIG. 16.

Length ♂ 5 mm.; femur I 4.2 mm. Mandibles two-thirds the length of the cephalothorax, pale, large tooth above is stout and blunt at tip; tibia of palpus barely longer than patella, palpus very short. Length of ♀ 7.5 mm.; femur I 4.2 mm. long; abdomen 1.6 mm. wide. Cephalothorax yellowish; abdomen rather silvery above (discolored). Mandibles one-half as long as the cephalothorax, no tooth on outer side of fang, which is nearly evenly curved. Eyes of the posterior row at equal distances; S. E. equal in size, and full as far apart as the M. E.; abdomen cylindrical.

One pair from Mt. Orizaba.

141. *Glenognatha minuta*, sp. nov.

PLATE XV, FIG. 15.

Length ♂ 3 mm.; femur I 1.8 mm. long. Cephalothorax reddish, with a black stripe in the middle, and spots each side; eyes on black spots; man-

dibles reddish. Legs pale, tips of joints blackish above. Abdomen brownish with a median row of silvery spots, and three large ones each side, sometimes blackish around the spots; venter dark, with a row of three pale spots each side; sternum red-brown. The four M. E. form a square; the S. E. touching, some distance from the M. E.; four teeth above on mandible, the two middle ones the larger, two very large ones below; a very distinct furrow on venter, nearer to the spinnerets than to the lung-slits.

Two males; San José del Cabo. Differs from *G. emertoni* in smaller size and armature of the mandibles.

EPEIRIDÆ.

142. *Gasteracantha cancriformis* Linn.

Epeira cancer HENTZ., Spiders of the U. S., p. 126.

Two specimens from San Quentin, two from Magdalena Island, and one from Orizaba.

143. *Gasteracantha hexacantha* Fabr.

Gasteracantha velitaris KOCH, Die Arach., IV, p. 33.

Gasteracantha rufospinosa MARX, Entom. Amer., Vol. II, p. 25.

Many specimens from Tepic, Sierra Laguna, and Guaymas.

144. *Acrosoma funebre* Marx ms.

Female—Cephalothorax 2 mm. long; abdomen 5 mm. long. Cephalothorax glossy black, mandibles blackish brown; maxillæ black with the inner margin white; labium blackish at base with a white tip; sternum glossy black; first coxæ black, second and third pale yellow testaceous, fourth testaceous with a black spot at underside. Abdomen black with fifteen white spots on the dorsum, five pair on each side, two inside of these two rows, side by side before the center, one larger at the center, and two behind the center and before the posterior superior spines, which are spotted with white at the sides; underside black with seventeen white spots—eight on each side, and one in the posterior region between the inferior posterior spines. Legs and palpi yellow, with a blackish ring on the distal end of the joints.

Cephalothorax considerably longer than broad, with a round impression at the base of pars cephalica. The four M. E. form a square which is slightly

wider posteriorly; they stand on a common tubercle; the S. E. are also placed on the sides of a tubercle and are slightly separated from each other; mandibles robust and parallel; maxillæ and labium as usual; sternum small, shield-like, somewhat redrawn from the coxæ, with a prominent tubercle opposite the coxæ; abdomen subcylindrical with only two pairs of spines at the posterior extremity; legs, fourth pair longest.

A few specimens; Calmalli Mines, Sierra San Nicolas, and Mazatlan.

145. *Acrosoma militaris* Fabr.?—Two specimens from Margarita Island appear to belong to this species.

146. *Acrosoma rugosa* Hentz.—Many from Tepic and Orizaba. A large variety.

147. *Acrosoma mitrata* Hentz.—One specimen; Tepic. Larger and darker than usual.

148. *Acrosoma 12-spinosum* Cambr.—One specimen; Tepic.

149. *Mahadeva verrucosa* Hentz.—Several specimens from Tepic.

150. *Plectana stellata* Hentz.—Two specimens; Tepic.

151. *Gea heptagon* Hentz.—A few specimens from San José del Cabo.

152. *Ordgarius obesus*, sp. nov.

PLATE XV, FIG. 9.

Length of ♀ 15 mm.; breadth of abdomen 15 mm. Cephalothorax dull yellowish brown; legs paler, uniform; sternum brownish, a little yellowish in center; abdomen yellowish, with golden lines coming up on the sides, four indented dark spots, the anterior pair in a yellow region, base of abdomen mostly grayish and extending behind in the middle, more or less broken up with yellow. Cephalothorax elevated, pars cephalica spinulated, two prominent elevations behind, truncate at tip and terminated at each corner by a

more prominent spinule; M. E. on a slight elevation. Legs short; femora curved near tip. Abdomen not very high, extending over the basal part of the cephalothorax, plainly broader than long. The epigynum consists of a small transverse at the margin of the rima genitalis.

Two specimens from La Chuparosa. Distinguished from *O. bisacatus* Em., by the processes on the cephalothorax being truncate at tip, and by its much larger size.

153. *Ordgarius corpulentus*, sp. nov.

PLATE XV, FIG. 8.

Length ♀ 13 mm.; abdomen, broad 10 mm., high 10 mm. Cephalothorax blackish in the front and elevated part, with the tubercles tipped with yellow, behind pale. Abdomen dark grayish, markings not distinct; venter yellowish; sternum and coxæ reddish; femora and tibiæ of legs reddish, darkest on anterior pairs, tarsi and metatarsi yellowish. Legs clothed with long white hair. Eyes as usual; cephalothorax gradually elevated, at the ridge divided into four lobes, the median pair smaller and barely higher than the lateral, terminated with two large blunt tubercles; a number of scattered blunt tubercles in front, some as large as those on the ridge. Abdomen high, globose, with two widely separated, conical projections above.

One specimen; San José del Cabo, Sept. This species is related to *O. conigerus* Hentz., but is larger and has tubercles on the anterior sides as well as the pars cephalica, all tipped with yellow; the median elevation is barely higher than the sides, and not furcate; the legs have no bands; and the projection above on abdomen is taller, but not of greater diameter.

154. *Epeira 11-tuberculata* Keys.—One specimen; Tepic. Near to *E. spicata* Cambr.

155. *Epeira perplexa*, sp. nov.

PLATE XV, FIG. 1.

Length ♀ 11 mm.; abdomen, broad, 7.5 mm. Clothed with short stiff white hair. Cephalothorax dull yellowish; mandibles pale; legs yellowish, anterior femora reddish, a dark band on middle and tip of hind femora, and spots beneath at tips of the joints, more prominent on the hind pair, all tarsi

black tipped, black spots on coxæ, except first pair; sternum pale, with a dark brown median spot, widest in front; abdomen yellowish, grayish behind, sides lined with black, two black patches on the venter. Cephalothorax broad in front; pars cephalica with a transverse hump each side behind the eyes; eyes on elevations; P. M. E. closer together and larger than A. M. E. Legs rather short. Abdomen nearly circular in outline, depressed, with a circle of conical humps above, three near each anterior side, two on each, posterior side, the hindmost the larger, and between these a median row of three small humps above the spinnerets, hind margin of abdomen vertical; the epigynum shows a median tapering finger with a blunt tip. In what I take to be young specimens of this species, the abdomen is much narrower and higher at tip.

One adult female; Sierra San Nicolas; young from Cape Region. Related to *E. hoxæa* Cambr., but it is different, has a longer epigynum.

156. *Epeira gemma* McCook.—Several specimens from San Julio, San José del Cabo, and Ensenada.

157. *Epeira singularis*, sp. nov.

PLATE XV, FIG. 4.

Length ♀ 7.5 mm.; abdomen, broad 5.5 mm. Cephalothorax pale reddish brown; legs similar, yellow on base of femora, tibiæ, and most of metatarsus; sternum and coxæ yellowish; abdomen dark gray, not uniform, but no distinct markings, four deeply impressed dots, and behind three parallel dark lines extending to tip; venter with two large pale spots. Cephalothorax and legs clothed with fine white hair. Cephalothorax broad in front; P. M. E. barely larger, but a little farther apart than the A. M. E. Legs short; sternum a little longer than broad, triangular. Abdomen broad, nearly circular, moderately high, just above spinnerets transversely wrinkled, on each side near base is a large but very low hump. The epigynum has a finger more slender than *E. vulgaris* and less slender than *E. trivittata*.

One female; Pescadero.

158. *Epeira balustina* McCook.—One female; Tepic. A large species, with black femora.

159. *Epeira bivariolata* Cambr.—Determined by Dr. Marx. The epigynum is longer, and I feel doubtful. Like

E. prompta it varies in markings. Several from Tepic, Coral de Piedras, El Taste, Sierra Laguna, and Sierra San Nicolas.

160. *Epeira conchlea* McCook.

Epeira clavispina CAMBR., Biol. Cent. Amer., Arach. Aran., p. 37.

Larger than *E. prompta*, and with one or two cones at the tip of abdomen; the epigynum broader at base. La Chuparosa, Sierra Laguna, San José del Cabo, and Sierra San Nicolas, July.

161. *Epeira prompta* Hentz.

Epeira parvula KEYS, Beschr. n. Orbitel., p. 131.

San José del Cabo, Coral de Piedras, and Tepic.

162. *Epeira detrimentosa* Cambr.

PLATE XV, FIG. 7.

Length 5 mm. Cephalothorax pale yellowish brown, clothed with white hair; legs similar, with dark rings at ends of femora and tibiæ, sometimes a median ring on anterior femora and tibiæ, and sometimes a brown stripe under these joints; sternum pale brown, with a central yellow line; abdomen grayish, with a broad blackish stripe on each anterior side, sometimes margined internally with a white line, mottled above with blackish, and traces of a folium behind; venter blackish, with two spots and a band behind epigynum yellow; the abdomen above is sometimes cream-white, showing four brown dots, in one specimen it is greenish. Cephalothorax a little longer than broad. M. E. equal, forming a quadrangle a little narrower behind than in front; P. M. E. their diameter apart; sternum a little longer than broad, sides rounded. Legs moderate; femora I a little shorter than cephalothorax, with quite long spines. Abdomen globose, a little broader than long. The epigynum has a striated finger, barely surpassing the circular cavity over which it rests.

Sierra San Nicolas and Mazatlan. As it also occurs in southern Texas the above description is given.

163. *Epeira helveola* Cambr.—Determined by Dr. Marx. One male; San José del Cabo.

164. *Epeira vertebrata* *McCook*.—Many from Tepic, Nov.; a few from San José del Cabo and Sierra San Nicolas.

165. *Epeira trivittata* *Keys*.—A few specimens; Orizaba, Guaymas, and Tepic.

166. *Epeira strix* *Hentz*.—Four specimens; Agua Caliente and Orizaba.

167. *Epeira vulgaris* *Hentz*.

Epeira volucripes *KEYS*, N. Spinn. a. Amer., VI, p. 528.

Adult ♀ from 8 to 10 mm. long. Sternum with a bright yellow stripe in the center; the yellow lunules on the venter are reduced to spots; the pale cross above is the principal mark seen; at the base is sometimes the beginning of a folium, also noticed at tip; on the sides the pale is limited by an irregular blackish stripe; all of the femora show more or less distinctly a ring on the middle as well as at tip. The finger of the epigynum, when elevated, gives the appearance figured by Keyserling. The M. E. are equal; the P. M. E. closer together than the A. M. E.

Three females from Orizaba. This species is different from *E. sclopetarius*, as Emerton suggests in his N. Eng. Epeiridæ.

168. *Epeira labyrinthica* *Hentz*.—A few specimens from each of the following localities: Tepic, El Taste, Cape Region, Orizaba, San Miguel de Horcasitas, Sierra San Nicolas.

169. *Epeira globosa* *Keys*.

Epeira solersioides *CAMBR.*, Biol. Cent. Amer., Arach. Aran., p. 25.

Several from Tepic and San José del Cabo.

170. *Epeira placida* *Hentz*.—Sierra San Lazaro, Sept., and El Taste.

171. *Epeira foliata* Hentz.—Male and female; Tepic.

172. *Epeira gibberosa* Hentz.—A few specimens; El Taste and San José del Cabo.

173. *Epeira zilloides*, sp. nov.

PLATE XV, FIG. 2.

Length ♀ 7.5 mm., ♂ 4 mm. Cephalothorax yellowish, blackish on pars cephalica and extending back to dorsal groove; mandibles brown; sternum brown, yellowish in middle; legs pale, all the joints (except hind femora) brownish, or with a brown ring at tip. Abdomen grayish, more yellow or white at base and with a blackish spot each side, but the folium not continued, a few dark spots and faint lines behind; venter with a broad dark region, containing a pale spot behind the epigynum; ♂ with the legs less distinctly marked. P. M. E. less than their diameter apart, smaller than the A. M. E., which are more than their diameter apart; mandibles rather prominent. Legs short and stout; abdomen elliptical, broadly rounded in front and behind. The epigynum shows a transverse elliptical brown area and two darker spots in front. The palpus is rather complicated; the tibia broad, with very long bristles; the tarsus short.

A few specimens from Tepic, Oct. Different from *E. gregalis* Cambr. Looks like *Zilla californica* Bks., but in that species the anterior femora are not darker at tips, there is a band on middle of hind tibia, the folium on abdomen is complete, and the ventral mark is narrower and without a pale spot.

174. *Epeira caudata*, sp. nov.

PLATE XV, FIG. 5.

Length ♀ 10 mm.; tibia 1 3.5 mm; metatarsus I 3 mm. Wholly pale yellowish, except a dark stripe from the epigynum to spinnerets; abdomen sometimes greenish. Cephalothorax about once and a half as long as broad, clothed with pale hair; M. E. equal, forming a quadrangle nearly as long in front as high, and a little narrower behind; P. M. E. separated by more than their diameter; A. M. E. by twice their diameter; S. E. smaller than M. E. and considerably separated from them, and slightly from each other. Legs quite thickly clothed with white hairs and some scattered spines; sternum once and a half as long as broad, pointed behind. Abdomen not quite three times as long as broad, somewhat pointed in front, and continued behind in a cone, which is sharp pointed at its tip. Male 8 mm. long, similar to female, except anterior femora

rather stouter and the spines on tibia stronger; tarsus of palpal organ quite slender, the bulb very large, and a large hyaline projection on one side.

Two specimens; Tepic, Oct.

175. *Vixia infumata* Hentz.—One specimen with no locality, and one from Tepic.

176. *Singa mæsta*, sp. nov.

PLATE XV, FIG. 3.

Length 3 mm. Cephalothorax brownish on sides, pale yellowish in middle, thinly clothed with white hairs; legs pale yellowish, tibiae of anterior pairs with a black line in front, anterior femora darker at tip; posterior tibia darker at tip; sternum red-brown; venter black in middle, yellow on sides; a broad black stripe on each side of abdomen; white above, with two black stripes from base to tip in the form of a folium, more or less connected, especially near tip; an incomplete median black line. Cephalothorax not much narrowed in front; P. M. E. a little larger than A. M. E.; M. E. form a quadrangle higher than broad; sternum broadly triangular. Legs short, with a few spines and many stiff hairs. Abdomen about once and a half as long as broad, somewhat depressed, broadly rounded in front and behind. Anterior metatarsus shorter than tibia I, posterior metatarsus longer than tibia IV.

One female; Tepic.

177. *Cyclosa conica* Pall.

Epeira caudata HENTZ., Spiders of the U. S., p. 114.

Four specimens; Guaymas.

178. *Cyclosa index* Cambr.—Several from Calmalli Mines; also known to me from Los Angeles, Calif.

179. *Cyrtophora fusiformis* Tacz.

Turckheimia diversa CAMBR., Biol. Cent. Amer., Arach. Aran., p. 136.

Sierra San Nicolas, Mazatlan, Mt. Orizaba, and Tepic.

180. *Argiope transversa* Em.—Two from Orizaba; one from Sierra San Nicolas.

181. *Argiope argentata* Fabr.—A few from San José del Cabo and Tepic.

182. *Argiope personata* Cambr.—A large number from Tepic, Nov., and two specimens from San Miguel de Horcasitas.

183. *Nephila clavipes* Fabr.—Many from Tepic, Nov. This is by most American authors called *N. plumipes*, which is, however, a South American species not known in the north.

184. *Nephila hasselti* Dolesch.—One entire specimen and one abdomen, from Baja California, appear to belong, without doubt, to this East Asian species.

185. *Argyræpeira argyra* Walck.—Several from Sierra Laguna and Minititlan; many from Tepic.

186. *Argyræpeira argentea* Kcys.—Many specimens from Tepic.

187. *Argyræpeira maura* Hentz.?—Two specimens from Tepic, Oct., are quite possibly this species, but somewhat differently marked.

188. *Larinia directa* Hentz.—One specimen from Tepic.

189. *Larinia bellona*, sp. nov.

PLATE XV, FIG. 6.

Length ♀ 7 mm.; tibia I 3.4 mm.; metatarsus I 3.8 mm. Cephalothorax, legs, and mandibles pale yellowish, a median reddish stripe from M. E. to dorsal groove, margin sometimes blackish; sternum pale yellowish, brown on sides; legs usually dotted with reddish at base of spines; abdomen grayish; with several more or less distinct wavy lines above, usually outlining a pale central stripe; venter with a brown stripe each side, uniting in front of the spinnerets. The cephalothorax is slender, narrowed in front, nearly twice as long as wide; quadrangle of M. E. a little more narrow than in *L. directa*; sternum less than twice as long as wide. Abdomen twice as long as wide, pointed in front, more rounded behind. The male is 4 mm. long, colored as in female; the legs more slender.

Several specimens from Sierra San Nicolas, Guaymas, and Tepic, Nov. Readily separated from *L. directa* by its shorter abdomen. Some from Tepic have the front legs and abdomen more reddish than the others.

190. *Azilia mexicana*, sp. nov.

PLATE XV, FIG. 19.

Length of ♂ 7 mm.; leg I 26 mm. Cephalothorax pale, with four forked blackish streaks above; mandibles yellow-brown; sternum dark, with a pale central spot; legs pale, with brown rings at the end and middle of the joints. Abdomen dark grayish, with a paler stripe in the center, and a darker stripe each side broken somewhat into spots; venter gray, rather pale in middle. Eye-region sloping, clypeus extremely narrow, both rows of eyes recurved, the M. E. rather larger, and the P. M. E. closer to S. E. than to each other; sternum plainly longer than broad, triangular. Legs long, especially the first pair, with a few long spines; fourth pair plainly shorter than the second. The abdomen rather narrow, high, and convex, twice as long as broad, pointed at tip. The ♂ palpus has a quite long blunt projection on the tibia; the bulb is rather simple, with a stout, slightly curved style toward the tip.

One adult male; three immature from Tepic, Nov. Quite distinct from *A. guatemalense* Cambr.

191. *Chrysometa alboguttata* Cambr.?

Meta alboguttata CAMBR., Biol. Cent. Amer., Arach. Aran., p. 2.

One immature specimen from Tepic is probably this species; it hardly agrees with *Chrysometa*, yet is much nearer to this genus than any other known to me.

THOMISIDÆ.

192. *Xysticus 4-lineatus* Keys. — Two specimens; La Chuparosa and Sierra Laguna.

193. *Xysticus fissilis*, sp. nov.

PLATE XVI, FIG. 5.

Length ♂ 4.4 mm.; ceph. 2.3 mm. long, broad 2.4 mm.; femur I 2.7 mm. Cephalothorax black on the sides, a yellowish stripe in the middle, whose anterior part is wholly occupied by a dark red-brown spot, extending back along

the median line to the point where the abdomen overlaps the cephalothorax, a narrow white band connects the A. S. E. and passes between the four M. E.; mandibles dark red-brown, a small white line on their outer tip; sternum dark brown, with some pale spots; coxæ pale, with a median line and some spots brown; femora and patellæ of anterior pairs black, usually showing a narrow white line beneath and spots above at tips, rest of these legs pale yellowish, with the tibiæ infuscated at base; posterior legs mottled, the femora with a white line below, the tibiæ and patellæ with one above. Abdomen white above, with an oblique brown mark each side at base, behind are three pairs of transverse spots more or less connected, various small dark dots, sometimes some of them indicate a narrow basal spear-mark; venter mottled, darkest at base. A. M. E. equal to P. M. E., a little nearer to A. S. E. than to each other. Four pairs of spines under tibiæ and metatarsi I and II. The tibia of the ♂ palpus has a large projection on the inner side, the tarsus is broad, the style extends around, and on the outer side at base is a projection outward for the tip of the style, in the middle of the bulb are two teeth curving toward each other, the upper the larger. A ♀ (scarcely mature) has the side-stripes of the cephalothorax divided behind, and a median dark line. The legs are mottled, brown bands before middle and apex of tibiæ. The abdomen pale, with small spots in the position of those of the ♂, and various dark dots; the sternum spotted; the legs shorter than in ♂.

Four males and one female; Tepic, Oct. and Nov.

194. *Xysticus apertus*, sp. nov.

PLATE XVI, FIG. 7.

Length 7 mm.; ceph. 3 mm. long, broad 3 mm.; femur I 2.8 mm. Cephalothorax brown on the sides, ending in two darker brown spots, a black median point, in front of which it is brownish, two darker median lines, a white band connecting the S. E.; mandibles mottled with brown at base, pale at tip; sternum dotted with brown; a black line on coxæ, and a spot on trochanters; anterior legs very thickly mottled with brownish, posteriorly paler on the femora, metatarsi and tarsi paler, a white line above on the patellæ and tibiæ; hind legs less spotted, a large spot on the middle of femora and a still larger one at the tip, and on the base and tip of patellæ and tibiæ. The abdomen has a broad dentate whitish stripe in the middle, and pale brownish ones on the sides, formed of the usual spots connected; sides and venter dotted with brown. A. M. E. as large as P. M. E., and fully as far apart, plainly nearer to the A. S. E. than to each other. Four pairs of spines under anterior tibiæ and metatarsi; sternum rather narrow, much longer than broad. Abdomen very short, broader than long.

One female and one young male; Cape Region.

195. *Xysticus discursans* Keys.

Xysticus bimaculatus EM., Can. Spid., p. 416.

One female, 5.2 mm. long, from Agua Caliente. It is

quite readily known by having only one large spot behind on each side, not divided as usual.

In my Colorado list I accidentally put *X. bimaculatus* under *X. montanensis*, whereas it goes here; and vice versa *X. pulverulentus* is a synonym of *X. montanensis*, instead of *X. discursans*.

196. *Xysticus curtus*, sp. nov.

PLATE XVI, FIG. 8.

Length 5.5 mm.; ceph. 2.3 mm. long, broad 2.3 mm.; femur I 2.1 mm. Cephalothorax whitish above, brown on sides, ending behind in two spots scarcely darker, a median pointed spot, in front a rather darker area, clypeus whitish; mandibles pale, with brown at base; femora pale beneath, mottled above; tibiæ and patellæ with two brown stripes above, between them a white line; hind pairs slightly mottled; sternum grayish, with brown dots. Abdomen gray, with indistinct transverse brown spots on the posterior part, and two short faint stripes in front. A. M. E. equal to P. M. E., and fully as far apart, plainly nearer to the A. S. E. than to each other; four pairs of spines under anterior tibiæ and metatarsi; sternum rather broad. Abdomen small, broadest just behind the middle, broadly rounded behind.

One female; Cape Region.

197. *Xysticus orizaba*, sp. nov.

PLATE XVI, FIG. 6.

Length 9 mm.; ceph. 3.8 mm. long, broad 3.4 mm.; femur I 3.4 mm. Cephalothorax mostly brownish in front, pale behind, each brown side terminated behind by two dark brown spots, the middle area terminated behind by a pointed spot; a darker band connects the S. E., in front of which it is white; mandibles mottled, paler at tips. Legs mottled, but the femora mostly pale below, a white line above on patellæ and tibiæ; sternum thickly dotted with brown; long mark on coxæ, and a spot on the trochanters dark brown. Abdomen with a large brown spot above, margined with pale; sides and venter pale, dotted with brown. A. M. E. fully as large as P. M. E., plainly nearer to the A. S. E. than to each other, but hardly so far apart as the P. M. E.; four pairs of spines under anterior tibiæ and metatarsi; sternum much longer than broad. Abdomen large, rather depressed, broadest behind the middle, broadly rounded behind. Male 5 mm. long; ceph. 2.1 mm. long; femur I 2.5 mm. long. In general similar to the female, but the femora spotted below, and the anterior tibiæ and metatarsi darker than the rest of leg. The abdomen of a rich brown color above, with transverse irregular spots, and margined with white.

Several specimens from Orizaba and one from Agua Caliente.

198. *Synæma æquinoctialis* Tacz.?—One specimen, immature, from Tepic, probably this species.

199. *Synæma* sp.?—Three specimens, all young, from Tepic, probably new, but not large enough for description.

200. *Misumena gracilis* Keys.—Several specimens from Tepic, Nov.

201. *Misumena dubia* Keys.—Several specimens from Tepic, Oct., Nov.

202. *Misumena fidelis*, sp. nov.

PLATE XVI, FIG. 2.

Length 7 mm.; ceph. 2.7 mm., broad 2.7 mm.; femur I 3.8 mm. Cephalothorax, legs, and mandibles yellowish, a double white spot above on the former, a white point at the tips of the latter, a white band connects the S. E.; sternum pale; abdomen yellowish, above with two converging rows of distinct black spots, ill defined, starting at middle, sometimes a median spot in front of them, and one on each posterior side. Eyes of anterior row at about equal distances; M. E. form a square. Legs of moderate length; four pairs of spines under tibiae I and II; seven and eight under metatarsi I and II. Abdomen broadest in the middle, pointed behind, rather high.

Several specimens from El Taste, La Chuparosa, and San José del Cabo.

203. *Misumena rosea* Keys.—Several examples from San José del Cabo.

204. *Misumena mexicana* Keys.?—A few females, probably this species: Tepic, Oct., Nov.

205. *Misumena conferta*, sp. nov.

PLATE XVI, FIG. 12.

Length 5.4 mm.; ceph. 2.2 mm. long, broad 2 mm., femur I 3 mm. Cephalothorax uniform brown, whitish around the eyes; a large median white

spot pointed behind, in front indented by a dark line; anterior legs brown like the cephalothorax, paler on the middle of metatarsi and on base of tarsi, a pale line beneath on patellæ; the mandibles brown, white at tip, and a short line on the outer side at base; sternum and posterior legs pale yellowish; abdomen pale grayish, traces of dark stripes reaching from the middle above toward the spinnerets. Eyes of anterior row at equal distances, the four M. E. equal, forming a square; five bristles on each side of anterior margin, one at corner, the next smaller, the others much nearer to the middle; four pairs of spines under tibiæ I and II, six pairs under the metatarsi I and II; abdomen rather quadrate, pointed at tip.

One female; La Chuparosa. Distinguished by a dark cephalothorax, shape of pale spot, and dark front legs.

206. *Misumena modesta*, sp. nov.

PLATE XVI, FIG. 1.

Length ♀ 5-6.5 mm.; ceph. 2.8 mm. long, broad 2.7 mm.; femur I 3.5 mm. Cephalothorax brown or dark yellowish on the sides, behind is a white spot which extends forward each side; eyes on a white spot; a narrow white median line and side lines connect the eye-spot with the one behind; mandibles whitish, a large brown spot at the base; legs like the cephalothorax; sternum pale; abdomen yellowish, in one specimen a few indistinct dark spots behind the middle. Three bristles on each side on anterior margin of the cephalothorax, one at the corner and two nearer the middle. Legs rather short; four pairs of spines under the anterior tibiæ, six pairs under anterior metatarsi. Abdomen broadest somewhat behind the middle; sternum shield-shaped, concave in front, sides rounded. The ♂ is 3.5 mm. long; femur I 2.8 mm. long. Cephalothorax dark brown on the sides, white above, rather darker in front, with a median line; anterior legs red-brown, paler in middle of tibiæ, base of metatarsi, and tarsi; abdomen white, with a dark brown stripe on each anterior side, and above two stripes from the middle to the spinnerets; sternum dark, and a median stripe on the venter.

Several specimens; Sierra Laguna, La Chuparosa, and San Miguel de Horcasitas.

207. *Misumena consueta*, sp. nov.

PLATE XVI, FIG. 4.

Length ♀ 4.6 mm.; ceph. 2 mm. long, 2 mm. broad; femur I 2 mm. Cephalothorax and mandibles pale uniform greenish; legs still paler, the anterior pairs rather more greenish; sternum pale; venter pale gray, with a triangular outline of silvery dots with apex at the spinnerets; above rather brownish, with black marks, two large ones at base and several transverse ones behind, just before the middle two round white spots, and behind a larger median

one, and behind this a smaller one, everywhere with black bristles arising from black dots. Cephalothorax broad, but little narrowed in front; A. M. E. nearer to S. E. than to each other; S. E. on a little white elevation; four M. E. equal in size, forming a square; four bristles each side on front margin, one at corner, and three toward the middle. Legs short; four pairs of spines under tibiae and metatarsi I and II; sternum nearly circular. The epigynum shows a transverse curved cavity, behind it a dark transverse body, in front a rounded border, above which is a dark spot.

One female; Tepic, Oct.

208. *Misumena decora*, sp. nov.

PLATE XVI, FIG. 13.

Length ♀ 6 mm.; ceph. 2.5 mm. long, 2.6 mm. broad; femur I 3.9 mm. long. Cephalothorax pale, rather darker on the sides, a transverse white spot behind with an extension forward on each side, somewhat reddish between the M. E.; mandibles pale, with a brownish spot at the base; in most specimens the legs are all pale yellowish, with red spot on the anterior tibiae before the tip. In two specimens, which have deposited their eggs, the anterior femora, patellae, and tibiae are of a uniform pale red; sternum pale; abdomen whitish, marked above with red, a basal spot (mostly divided by a white line) followed by two converging rows of transverse spots, the basal pairs enclosing black dots, a red stripe on each anterior side, and on posterior sides oblique spots to the spinnerets. Eyes of anterior row at about equal distances; four M. E. equal and form a square; four bristles each side on anterior margin. Legs long; five or six pairs of spines under tibiae I and II, eight pairs under those metatarsi. The male is 3.2 mm. long; femur I 3.2 mm. long. Abdomen with two rows of dark spots above; femora I and II dotted with red, and red bands at the tip; also red at tip of patellae, base and tip of tibiae, and apical halves of metatarsi and tarsi. The style of the palpus is upon the ventral face, and not partly at right angles to it, as in many species.

Several specimens; El Taste, Sierra Laguna, and Sierra San Lazaro, Sept.

209. *Misumena peninsulana*, sp. nov.

PLATE XVI, FIG. 3.

Length ♀ 6–6.5 mm.; ceph. 2.4 mm. long, broad 2.4 mm.; femur I 3.2 mm. Cephalothorax, legs, mandibles, and sternum uniform pale yellowish, a white spot on middle scarcely distinct; abdomen whitish above and beneath, five impressed dots. Eyes of anterior row at equal distances; P. M. E. scarcely further apart than A. M. E.; four bristles each side on anterior margin. Legs moderate; four to five pairs of spines under anterior tibiae, seven

pairs under these metatarsi. Abdomen usually broadest behind the middle, pointed at the tip. The δ is 2.9 mm. long; femur I 3 mm.; pale, sometimes indistinct spots on the abdomen; femora I and II not dotted, or but faintly, red band at tip, and at tip of patellæ, base and broad band at tip of tibiæ, apical halves of metatarsi and tarsi; palpi much like *M. spinosa*, the style short.

Various examples from El Taste, Sierra San Nicolas, Sierra Laguna, and San José del Cabo, Sept.

210. *Misumena* sp.?—Two specimens (φ) from El Taste appear to be different from the others, but are rather uncertain. They are much like *M. peninsulana*, but plainly much smaller.

211. *Diaea damnosa* Keys.—Several specimens from Tepic, Oct. and Nov.

212. *Runcinia parva* Keys.?—Two immature females, probably this species; Tepic.

213. *Runcinia* sp.?—Two young females from Magdalena Island. White spot on the cephalothorax connected by a median line to the eye-region; on each side of the abdomen is a red stripe.

214. *Tmarsus magniceps* Keys.—One young specimen from San José del Cabo.

215. *Tmarsus separatus*, sp. nov.

PLATE XVI, FIG. 10.

Length 5 mm.; ceph. 2 mm. long, broad 1.8 mm.; femur I 2.4 mm. Cephalothorax brown, darkest behind and on the sides, a curved white line across the thoracic region, behind which is a small white spot, in front are three white lines, separated at base, and extending to the eye-region; a transverse line behind the P. M. E., a spot in front, and the anterior margin narrowly white. Legs pale yellowish, basal joints of anterior pairs (except

femur II) dotted with brown, a large spot at end of tibiae, and a narrow band at the tip of the metatarsi; usual black spot on patella IV, and a line on tibia, both margined in front with white; sternum pale, dotted with brown. Abdomen with a pale grayish dentated stripe in the middle above, and on the sides brown, below white, with a broad brown stripe in the middle, a short dark brown stripe reaching forward each side from near the spinnerets. P. M. E. much larger and farther apart than the A. M. E., the latter about as far from the A. S. E. as from each other; three large bristles each side on the anterior margin and one in the middle. Abdomen broadest behind the middle, pointed at tip; a well-developed cone above, and eight little elevations as follows: two before the middle, two just behind the middle, and four in a curved row before the hump.

One female: El Taste.

216. *Tmarsus*, sp.?—Young specimen from Tepic, Oct.

217. *Thanatus peninsulanus*, sp. nov.

PLATE XVI, FIG. 11.

Length ♀ 8 mm.; ceph. 2.5 mm. long, broad 2.6 mm.; femur I 3 mm. ♂ 5.5 mm., femur I 3.8 mm. long. Specimens often much larger, especially the abdomen. Cephalothorax pale yellowish, with a more or less distinct brownish stripe each side; mandibles, legs, and sternum pale, dotted with brown. Abdomen pale, a basal brown spear-mark, followed by two converging series of brown spots, sides dotted; venter with four brown lines; all markings variable in distinctness, sometimes running together, especially the legs, with browner lines and spots. A. M. E. fully as large as A. S. E., and their diameter apart, scarcely closer to the S. E.; eyes of posterior row equal and at about equal distances.

Many specimens from San José del Cabo.

218. *Ebo mexicana*, sp. nov.

PLATE XVI, FIG. 9.

Length 4 mm.; ceph. 1.5 mm. long, broad 1.5 mm.; femur I 1.8 mm., femur II 3.2 mm. long. Cephalothorax pale, with a large brown spot each side, not reaching behind to posterior margin, but extending down on the clypeus, each spot incloses a few white dots; a small median posterior spot, and two elongate spots behind the P. M. E. brown; mandibles pale, a brown spot at base and at tip. Legs pale, with brown bands on the middle and tip of femora, tip of patellæ, base and tip of tibiae, and base of metatarsi; on femur

II the bands are nearly united, on hind femora the middle band sometimes broken into dots; sternum pale, in one specimen with marginal dots. Abdomen with a basal brown spear-mark, margined with white, the white behind is a median stripe separating two dark stripes, thickly mottled with brown on anterior sides; venter pale, or slightly dotted with brown. The A. M. E. are much larger and closer together than the P. M. E., not much over their diameter apart, still closer to the smaller A. S. E.; P. M. E. much nearer to the P. S. E. than to each other; two pairs of long spines under tibia and metatarsus I; abdomen broadest in the middle, pointed behind.

Two female specimens from Hermosillo.

SPARASSIDÆ.

219. *Heteropoda venatoria* Linn.—Many specimens from San José del Cabo; a few from Tepic.

220. *Olios fasciculatus* Sim.—Several from San José del Cabo. I think that *O. concolor* and *O. giganteus* Keys are this species.

221. *Olios peninsulanus*, sp. nov.

PLATE XVI, FIG. 19.

Length ♀ 13 mm.; ceph. 4.3 mm. long, broad 3.9 mm.; femur I 4.5 mm. Cephalothorax, legs, mandibles, and sternum pale yellowish; fangs dark red-brown; abdomen light gray above and below, with a more or less distinct median row of brown dots above. The cephalothorax is convex, highest a little behind the eyes; posterior row straight, plainly longer than the anterior row, equal in size and at nearly equal distances; the M. E. twice their diameter apart; A. M. E. larger, once their diameter apart, plainly closer to the equal A. S. E.; mandibles short, prominent. Legs moderately short; two pairs of spines under all tibiæ and metatarsi; sternum broader than long, triangular, pointed between hind coxæ. Abdomen rather large, oval, rounded at base, pointed at tip. The ♂ is similar to the ♀, but smaller and proportionally longer legs; the tarsus of the palpus blackish.

Several specimens; Sierra San Lazaro and San José del Cabo.

222. *Olios luctuosa*, sp. nov.

PLATE XVI, FIG. 15.

Length ♀ 11.5 mm.; ceph. 4.9 mm. long, broad 4.6 mm.; femur I 5.6 mm. Cephalothorax, mandibles, sternum, and legs pale yellowish, the latter with the metatarsi and tarsi darker; fang red-brown. Abdomen pale gray above, with a median row of black spots in the posterior half, and numerous small blackish dots, most numerous behind; venter spotted, and with a broad black stripe from furrow to spinnerets, broadest at base. Cephalothorax highest at posterior part of pars cephalica; posterior eye-row straight, equal, M. E. fully twice their diameter apart, scarcely so far from the S. E.; A. M. E. larger, fully their diameter apart, closer to the slightly smaller A. S. E.; mandibles short and stout; sternum broader than long, triangular, sides slightly rounded. Legs moderate; two pairs of spines under all tibiae and metatarsi. Abdomen not very large, rather truncate at base, blunt-pointed at tip, somewhat depressed.

Two adults and several young from Tepic, Nov.

223. *Olios ferrugineus* Koch.—One female, from Tepic.**224. *Selenops debilis*, sp. nov.**

PLATE XVI, FIG. 14.

Length ♀ 11 mm.; ceph. 4.2 mm. long, broad 4.5 mm.; femur I 4.8 mm. Cephalothorax, sternum, and legs pale yellowish, the former with a black seam, the latter with dark spots at base and beyond the middle of the femora and tibiae, most distinct on the underside and on the anterior pairs; mandibles rather reddish. Abdomen pale gray, darker on each posterior side, and sometimes dark patches above. The A. M. E. about their diameter apart, plainly closer to the very much larger P. M. E., which are fully twice their diameter from the larger P. S. E.; sternum scarcely longer than broad, slightly narrowed in front, blunt behind. Legs short; three pairs of spines under tibiae I and II, two pairs of small spines under tibiae III and IV. Abdomen broad, truncate at base, broadest behind the middle, broadly rounded behind.

Two females and several young; San José del Cabo.

225. *Selenops* sp.?—Many specimens from San José del Cabo. These may be *debilis*, but all are immature; some, however, are larger than adult *debilis*; the abdomen is darker.

226. *Selenops morosa*, sp. nov.

PLATE XVI, FIG. 16.

Length ♀ 17 mm.; ceph. 8 mm. long, broad 8 mm.; femur I 9.5 mm. Cephalothorax, sternum, and legs pale yellowish, a black seam to cephalothorax, black bands at bases and beyond middles of tibiae I, II and III, metatarsus I and II infuscated, and some spots on the femora; mandibles red-brown, paler at base. Abdomen dark gray above, paler beneath. Cephalothorax flat, highest in eye-region, groove quite long; A. M. E. less than their diameter apart, rather closer to the plainly larger P. M. E.; the latter a little smaller than the P. S. E., from which they are separated by once and a half their diameter. Legs long, but quite stout; three pairs of spines under tibiae I and II, two pairs under III and IV; sternum plainly longer than broad, sides rounded, slightly narrowed in front, blunt behind. Abdomen short, depressed, truncate at base, pointed at tip. Male similar, but rather paler and markings less distinct; 13 mm. long.

Several specimens from Tepic, Oct. and Nov.

LYCOSIDÆ.

227. *Lycosa scutulata* Hentz.—Young from Tepic.

228. *Lycosa coloradensis* Bks.—One male from Hermosillo; a female (not quite adult), probably this species, from San Miguel de Horcasitas.

229. *Lycosa grandis* Bks.—San José del Cabo; the southwestern representative of *L. babingtoni*.

230. *Lycosa adusta*, sp. nov.

PLATE XVI, FIG. 31.

Length ♀ 11 mm.; ceph. 4.7 mm. long, broad 3.6 mm.; tibia and patella IV 3.6 mm. Cephalothorax pale red-brown, rather lighter in spots toward the sides; above a median pale stripe, starting quite broad between the eyes, gradually widening, and then contracted before the groove and tapering to the hind margin; mandibles red-brown; sternum and legs yellowish, no marks; abdomen dark brown above, uniformly dotted with very small pale dots; venter much lighter; epigynum reddish. Cephalothorax rather low; anterior eye-row barely curved, a trifle shorter than second row. Legs very

short and the femora stout; tibia III not much more than twice as long as broad; sternum plainly longer than broad. Abdomen rounded at base, pointed at tip, about twice as long as broad.

One female; San Miguel de Horcasitas.

231. *Lycosa punctiventris*, sp. nov.

PLATE XVI, FIG. 26.

Length 18 mm.; ceph. 8 mm. long, broad 6.5 mm.; tibia plus patella IV 8.5 mm. Cephalothorax red-brown, black around eyes, a narrow pale stripe each side, and a narrower one above starting as a line from between the A. M. E.; mandibles almost black; sternum and coxæ light red-brown; legs yellowish brown, darker toward the tips, no bands; abdomen dark brown above, a basal black spear-mark, indistinctly surrounded by pale, which disappears behind; venter light brown, with many scattered black dots. First eye-row about straight, scarcely shorter than the second. Legs very short and stout; three pairs of spines under all tibiæ, the basal pairs on anterior legs are shorter than the apical pairs. Abdomen high, rounded at base, pointed behind, broadest behind the middle.

One female; San José del Cabo.

232. *Lycosa concolor*, sp. nov.

PLATE XVI, FIG. 25.

Length ♀ 21.5 mm.; ceph. 10.5 mm. long, broad 7.5 mm.; tibia plus patella IV 11.5 mm. Cephalothorax and legs above light yellow-brown, darker around eyes, femora and metatarsi and tarsi blackish beneath, and a dark band at end of hind tibia; mandibles light red-brown, with a few yellowish hairs; maxillæ pale; coxæ and sternum blackish; venter black; abdomen above yellow-brown, with a black median stripe, sparsely clothed above with long yellowish hair. First eye-row slightly curved, shorter than the second, eyes of latter less than their diameter apart. Legs stout and moderately long; very hairy; spines very weak, three pairs under all tibiæ; distinct scopulas under the metatarsi (except IV) and tarsi. Abdomen rounded at base, blunt-pointed at tip; epigynum very small.

One female and two young; Tepic, Nov. The young are paler colored beneath.

233. *Lycosa emuncta*, sp. nov.

PLATE XVI, FIG. 30.

Length ♀ 18 mm.; ceph. 10 mm. long, broad 7.8 mm.; tibia plus patella IV 10 mm. Cephalothorax red-brown, paler on the sides, no distinct markings; mandibles dark red-brown; sternum, coxæ, and legs light reddish,

the latter darker toward tip, no bands; abdomen black, two short narrow stripes on the basal part above, behind some transversely connected spots, pale; venter black. First eye-row nearly straight; the M. E. plainly larger than the S. E. Legs moderately stout; three pairs of spines under all tibiae; the apical pair but little shorter than the others. Abdomen short, rounded at base and tip.

Two specimens; San José del Cabo.

234. *Lycosa persimilis*, sp. nov.

PLATE XVII, FIG. 2.

Length 16 mm.; ceph. 6.9 mm. long, broad 5 mm.; tibia plus patella IV 7.1 mm. Cephalothorax pale yellowish or reddish, an irregular brown stripe each side, terminating behind in a darker spot, the pale space of nearly equal width throughout, but starting between the eyes as a white line; eyes on black spots; mandibles dark red-brown, clothed with tawny hairs. Legs paler yellowish brown, the hind tibia with a dark band at base and tip; sternum, coxae, and venter wholly jet black. Abdomen above light brownish, with a dark basal spear-mark, and behind spots or chevrons of pale; sides pale. First eye-row curved, plainly shorter than the second, the latter their diameter apart. Legs of moderate length; three pairs of spines under all tibiae; sternum plainly longer than broad. Abdomen rounded at base, pointed at tip, quite high and convex. The ♂ smaller, 10 mm. long; colored like the ♀, but the legs paler and with distinct dark bands at base and ends of tibia IV.

Many specimens from Tepic, Oct. and Nov., and San José del Cabo, the latter are rather larger than the others; the specimens not quite mature are larger than the adult ones. A species similar to *L. erratica* Hentz.

235. *Lycosa injusta*, sp. nov.

PLATE XVII, FIG. 1.

Length ♂ 22 mm.; ceph. 11.5 mm. long, broad 8.5 mm.; tibia plus patella IV 13 mm. Cephalothorax red-brown, the radial furrows darker, a narrow pale stripe in the middle and another each side; mandibles dark red-brown, with tawny hair. Legs light brownish, the tibiae and metatarsi of anterior pairs darker, all clothed above with white hair, but below the femora are brown at tips, the patellae wholly white, the tibiae brown at bases and tips, and the metatarsi slightly brownish; sternum and coxae are dark brownish, which color extends over the venter to the furrow and gives off behind two

short projections upon the pale venter; brown at base of the spinnerets. Abdomen light brown above, with darker spots, and two larger ones at base; ♂ palpus pale except the brown tarsus. First eye-row curved, plainly shorter than the second. Legs long and stout; three pairs of nearly equal spines under all tibiae, hair under tibiae and tarsi of anterior pairs so dense as to almost form scopulas; sternum not much longer than broad. Abdomen short, pointed at base and behind, not depressed.

One male; Hermosillo; a female, probably of this species (immature), from San Miguel de Horcasitas is colored about the same, but the anterior tibiae are scarcely darker than the femora.

236. *Lycosa futilis*, sp. nov.

PLATE XVI, FIG. 32.

Length ♀ 11.2 mm.; ceph. 5.8 mm. long, broad 4.2 mm.; tibia plus patella IV 5.8 mm. Cephalothorax pale yellow-brown, a faint narrow pale stripe each side, and a narrow median one starting as a line between eyes of second row, gradually widening to the groove, then tapering to the hind margin; eyes on black spots, radial furrows darker than elsewhere; mandibles reddish; sternum and legs pale yellowish, no markings. Abdomen with a basal dark, almost blackish, spear-mark reaching to the middle of the dorsum, surrounded by pale which is continued, as two rows of spots, to the tip, each side of the pale is an irregular brown stripe; sides and venter pale. Anterior eye-row curved, a little shorter than the second row. Legs short; three pairs of nearly equal spines under all tibiae. Abdomen subcylindrical, broadly rounded at tip, subtruncate at base. The ♂ is similar to the ♀ but a little smaller; the palpi wholly pale and very short.

Agua Caliente, Orizaba, Motzoronga, and Tepic, Oct. Two specimens from San José del Cabo are rather darker and have an irregular black spot on the basal part of the venter.

237. *Lycosa mexicana*, sp. nov.

PLATE XVII, FIG. 3.

Length ♀ 16 mm.; ceph. 7 mm. long, broad 4.8 mm.; tibia plus patella IV 7 mm. Cephalothorax dark red-brown, a broad stripe of white hair above, broad as the space between dorsal eyes, then tapering behind to a point; mandibles almost black; sternum and coxae blackish; legs reddish brown, no marks; abdomen dark brown above, a basal black spot each

side extending back as a stripe on the upper side, but rather indistinct, the space between and below paler; venter black. Anterior eye-row slightly curved, a trifle shorter than the second row; three pairs of spines of nearly equal size under all tibiae. Abdomen rather long, subcylindrical, pointed at tip, rounded at the base. The ♂ is similar, but a little smaller, and the black side-stripes on the abdomen more distinct; the palpus pale, except the tarsus, which is dark.

A pair from Mt. Orizaba, and a male from Vera Cruz (rather paler).

238. *Lycosa* sp.?—One female from Minititlan, much like *L. mexicana*, but the venter pale, possibly only a variety of that species.

239. *Diapontia* sp.?—Many young specimens from Tepic and San José del Cabo. It has a dark cephalothorax, with a narrow pale stripe each side, and a narrow black median stripe on dorsum of the abdomen.

240. *Trochosa cinerea* Fabr.—Many specimens from San José del Cabo, Sierra San Lazaro, Ensenada, Tepic, Mt. Orizaba, and Vera Cruz.

241. *Trochosa parva* Bks.—Three specimens from Tepic, and two without locality, probably from Baja California.

242. *Trochosa mexicana*, sp. nov.

PLATE XVII, FIG. 4.

Length ♀ 9 mm.; ceph. 5 mm. long, broad 3.9 mm.; tibia plus patella IV 5.5 mm. Cephalothorax pale yellowish, an irregular brown stripe each side, and the margins dark, eyes on black spots; mandibles rather reddish; sternum and legs pale yellowish, the latter with dark bands on the femora, most distinct on the under side, sometimes also on the tibiae. Abdomen blackish above, with a narrow basal spear-mark of pale, and some spots each side of it; venter pale brownish. Cephalothorax low in front, sides much sloping, first eye-row no longer than the second, dorsal eyes considerably farther apart than those of second row. Legs short, except the fourth pair, femora very stout, three pairs of spines under all the tibiae; sternum

nearly as broad as long. Abdomen short, subtruncate at base, broadly rounded at the tip; epigynum shows a transversely elliptical cavity behind a hard reddish plate.

Four females from Tepic, Oct.

243. *Aulonia* (?) *funerea* Hentz.—Several examples from Tepic.

244. *Pardosa milvina* Hentz.—Many specimens from Tepic, Oct. and Nov., and Orizaba.

245. *Pardosa sabulosa*, sp. nov.

PLATE XVI, FIG. 28.

Length ♀ 5.5 mm.; ceph. 2.4 mm. long, broad 2 mm.; tibia plus patella IV 3.1 mm. Cephalothorax dark brown, black in eye-region, a broad pale spot in middle, truncate in front, pointed behind; mandibles red-brown; sternum blackish; legs yellow-brown, paler on tips, femora with a pale spot across middle above; abdomen black, a basal broad pale spot and behind two rows of connected spots; venter light brown. Three pairs of long spines under tibia I, and a short pair at tip; sternum about as broad as long; abdomen rather depressed, broad, truncate at base, pointed at tip.

Three examples from Tepic, Nov.

246. *Pardosa medialis*, sp. nov.

PLATE XVI, FIG. 29.

Length 4.5 mm.; ceph. 2.1 mm. long, broad 1.6 mm.; tibia and patella IV 2.9 mm. Cephalothorax pale yellowish, black around the eyes, two broad straight brown stripes above, leaving a narrow median pale area, which is divided by a dark line, a few black dots near the margin; mandibles, sternum, and legs pale yellowish, the latter without bands, but darker at tips of hind tibiae and tarsi; abdomen blackish above, with a pale median line from base to tip, its posterior portion margined with geminate spots; venter pale; epigynum reddish. Three pairs of long spines under tibiae I and II, and a short pair at tip; sternum about as broad as long; abdomen truncate at base, pointed at the tip.

One specimen; Tepic, Oct.

247. *Pardosa futilis*, sp. nov.

PLATE XVI, FIG. 23.

Length ♀ 7.2 mm.; ceph. 3.7 mm. long, broad 3.1 mm.; tibia plus patella IV 4.1 mm. Cephalothorax red-brown, darker in the eye-region, a pale stripe behind indistinct; mandibles brown; sternum black; legs pale, with broad black bands, except on the tarsi; abdomen mostly blackish, reddish basal spot; venter light brown. The cephalothorax is rather broad; the legs of moderate length, three pairs of long spines under tibia I and a short pair at tip; abdomen quite broad. The ♂ is similar to the ♀, but darker, mostly black; legs, except femora and hind tibiæ, wholly pale; palpi black.

Three examples from San José del Cabo.

248. *Pardosa dilecta*, sp. nov.

PLATE XVI, FIG. 24.

Length ♀ 8 mm.; ceph. 3.5 mm. long, broad 3 mm.; tibia plus patella IV 4.8 mm. Cephalothorax red-brown, black in the eye-region, an indistinct median pale stripe behind, whole surface clothed with white hair; mandibles light brown; sternum black; legs brownish, yellowish toward the tips, the femora above with elongate pointed pale spots; abdomen black above and on the sides, scarcely showing a reddish basal spot; venter light brown. Cephalothorax rather broad, much narrowed in front. Legs moderate, fourth pair very long; two pairs of spines under tibia I and a short pair at tip. Abdomen truncate at base, pointed at the tip, rather broad and depressed.

One female; Baja California, no further locality.

249. *Pardosa sierra*, sp. nov.

PLATE XVI, FIG. 20.

Length ♀ 5.6 mm.; ceph. 2.6 mm. long, broad 2.2 mm.; tibia plus patella IV 4 mm. Cephalothorax dark brown, black in the eye-region, a few pale side-spots and short central stripe, constricted in front and pointed behind; mandibles pale brown; sternum brown; legs pale, dark bands on the femora; abdomen with a pale basal spot, behind two series of small spots, the posterior ones united, sometimes all run together in a broad irregular pale stripe, elsewhere black; venter light brown. Cephalothorax short; legs quite long; three pairs of long spines under tibia I, and a short pair at tip; abdomen short and broad. The ♂ is similar to the ♀, but smaller; palpi wholly black.

Four specimens from Sierra Laguna.

250. *Pardosa peninsulana*, sp. nov.

PLATE XVI, FIG. 22.

Length ♀ 7.5 mm.; ceph. 3 mm. long, broad 2.3 mm.; tibia plus patella IV 4 mm. Cephalothorax dark brown, a narrow pale stripe each side extending from the anterior to the posterior margin, side-margin dark brown, a pale narrow middle stripe, containing a median brown line, divided in front into three parts or broken into three spots; mandibles pale; sternum dark brown, usually with a median pale line and sometimes pale borders. Legs pale, with short brown stripes on the femora above; coxæ black above; abdomen blackish above, with a pale basal spear-mark, and behind some indistinct dots; venter pale. Cephalothorax slender; legs rather short except the hind pair, two pairs of long spines under tibia I and a short pair at tip; abdomen rather slender, rounded at base. The male is similar to the female, but is smaller, and the dark markings more extensive; the male palpus is black on the tarsus, pale elsewhere; venter sometimes infuscated and also under side of the coxæ.

Several specimens from the Cape Region.

251. *Pardosa bellona*, sp. nov.

PLATE XVI, FIG. 21.

Length ♀ 5.1 mm.; ceph. 2.5 mm. long, broad 2 mm.; tibia plus patella IV 3.3 mm. Cephalothorax pale, a blackish serrate stripe each side and a few dots along the margin; eye-region blackish, pale in the middle; clypeus pale; mandibles pale, with an elongate black spot at the base; sternum and coxæ below pale yellow. Legs pale, with numerous blackish bands on all joints except tarsi; abdomen whitish, a blackish stripe each side formed of irregular dots, a basal yellowish spear-mark; venter pale; epigynum reddish. Cephalothorax moderately long, narrow in front; three pairs of long spines under tibia I and a short pair at tip; abdomen rather narrow, subcylindrical. The ♂ similar to ♀; the cephalic markings larger and darker; mandibles black; the palpi black, the femur and patella clothed with white hair, the tibia and tarsus with dense black hair; coxæ I and basal half of femur I black, and sometimes a large black spot on front of femur II, rest of legs banded as in ♀; abdomen black, with a narrow pale stripe; venter pale. Some males are colored more like the females than others.

Several specimens from San Miguel de Horcasitas, Magdalena Island, Coral de Piedras, and San José del Cabo.

252. *Pardosa parallela*, sp. nov.

PLATE XVI, FIG. 27.

Length ♀ 6 mm.; ceph. 3 mm. long, broad 2.1 mm.; tibia and patella IV 4 mm. Cephalothorax pale, a straight dark brown stripe each side; eye-region black, some white hairs in the middle; clypeus black, posterior sides narrowly brown; mandibles red-brown; sternum pale yellow; legs yellowish at base, gradually becoming more red-brown toward the tips, but tarsi pale, without trace of bands; abdomen black above, a pale basal spear-mark and beyond two approximate rows of small pale spots; venter pale, epigynum reddish. Cephalothorax long and slender, much narrowed in front; legs long, two pairs of long spines under the anterior tibia and a short pair at tip; abdomen short, subcylindrical, hardly broader than the cephalothorax.

Several females from Sierra San Lazaro, Sept.

253. *Pardosa*, sp.?—One female from Vera Cruz, not sufficiently distinct for description.

254. *Dolomedes major*, sp. nov.

PLATE XVII, FIG. 5.

Length ♀ 24 mm.; ceph. 11 mm. long, broad 9 mm.; femur I 10 mm. Cephalothorax yellow-brown, with a narrow yellow stripe each side, a pale median line from the groove to the P. M. E., and often showing a curved line behind the P. S. E.; mandibles red brown; sternum pale, with brown spots around the sides. Legs yellow-brown, darker toward the tips, without bands; abdomen brown, rather blackish above, a pale indistinct basal spear-mark and a submedian row each side of five white dots, and a short whitish stripe on each posterior side. A. M. E. plainly larger than A. S. E.; eyes of posterior row about equal. Legs very stout; four pairs of spines under anterior tibiae. Abdomen rather high, once and two-thirds as long as broad. The ♂ is similar but smaller, 17 mm. long, especially the abdomen, and proportionally longer legs; the hind femur has below at its apical third a prominent stout spur tipped with many short black spines; the general color is paler and the white dots surrounded by black. One ♀ is almost black, but does not differ structurally.

Many specimens from San José del Cabo and Sierra San Lazaro.

254a. *Dolomedes major*, var.—Two males from San José del Cabo are a little smaller than the others and the

projection on the tibia of the palpus is not near as much widened at tip. They have the characteristic spur on the hind femur.

255. *Dolomedes minor*, sp. nov.

PLATE XVII, FIG. 6.

Length ♀ 14 mm.; ceph. 6 mm. long, broad 5 mm.; femur I 8.5 mm. Cephalothorax pale yellow-brown, darker above and on the margin, a narrow white stripe each side from anterior to posterior margin, a white spot in middle of clypeus, a pale line from groove to P. M. E., and lines behind the P. S. E.; mandibles pale yellowish, clothed with long white hair; sternum pale, indistinctly darker on the sides. Legs pale yellow-brown, darker toward tips; the femora show indistinct darker bands above. Abdomen light brown, with a broad dark brown stripe above, narrow and indented toward the tip, its base containing a pale spear-mark. A. M. E. larger than A. S. E.; P. S. E. scarcely larger than P. M. E. Legs long and slender; four pairs of long spines under the anterior tibiæ and a short pair at tip. Abdomen depressed, once and three-fourths as long as broad, rather truncate at the base. The ♂ is smaller than the ♀, 10 mm. long, with a much narrower abdomen, paler and proportionally longer legs.

Many specimens from San José del Cabo, Guaymas; Sierra San Lazaro, Sept.; and Tepic, Oct.

CTENIDÆ.

256. *Ctenus hibernalis* *Hentz.*—A few from Minititlan, Orizaba, and La Chuparosa.

257. *Ctenus punctulatus* *Hentz.*—A few from Tepic in Nov.

258. *Ctenus* sp.?—A large female (not quite adult) from Minititlan differs from either of the above species.

259. *Acanthoctenus spinigerus* *Keys.*—Several specimens from Minititlan, Orizaba, and Mexico City.

OXYOPIDÆ.

260. *Peucetia viridans* Hentz.—Many specimens from San José del Cabo, Oct. and Nov. Some of them are quite reddish.

261. *Hamataliwa grisea* Keys.—One specimen from San José del Cabo.

262. *Oxyopes flava*, sp. nov.

PLATE XVII, FIG. 28.

Length 7.5 mm. Cephalothorax, mandibles, legs, palpi, and sternum yellow; eyes on black spots, a black line from each anterior eye down upon mandibles; base of spines on legs black; some spatulate scales on the cephalothorax. Abdomen usually paler yellow, with a gray spear-mark at base, and a black stripe each side near tip, sometimes very short; venter with a broad black median stripe, black spot over epigynum; spinnerets yellow, lined with black. Cephalothorax high, from eyes to dorsal groove barely concave, behind steeply sloping; eyes about as usual, P. M. E. hardly three times their diameter apart. Legs with many spines arranged as in *O. salticus*.

A few specimens from Sierra San Lazaro, Sept.; San José del Cabo, Sept.; and Tepic, Oct. Related to *O. salticus*, but readily separated by brighter yellow color, no black stripe on legs, larger size, and different epigynum.

263. *Oxyopes brevis*, sp. nov.

PLATE XVII, FIG. 26.

Length 4.5 mm. Cephalothorax dull yellowish, clothed with white scales, a median narrow white stripe on clypeus and a broader one each side; eyes on black spots; in some specimens there is a darkish spot on each posterior side of cephalothorax; mandibles yellowish, clothed with short white scales; sternum and legs pale yellowish, the latter sometimes with brown bands on the middle of the joints, clothed with some scales, fine hairs, and many stout spines. Abdomen dull yellowish, clothed with scales above and on sides, hairs below, a dark stripe on each lower side and one on middle of venter. Cephalothorax short and high, straight from eye-region to dorsal groove; eyes about as usual; P. M. E. fully three times their diameter apart. Legs short and stout; sternum triangular, but little longer than broad. Abdomen short,

once and one-fourth as long as broad, blunt pointed behind. Epigynum shows a cavity broader than long, limited on sides and behind by a black ridge and divided by a pale septum.

Four specimens; El Taste.

264. *Oxyopes acutus*, sp. nov.

PLATE XVII, FIG. 27.

Length 7 mm. Cephalothorax dull yellowish, thickly clothed with white scales, as also rest of body; eye-region black, a brown stripe each side above not reaching to the posterior margin, and one each side on the clypeus extending down upon the mandibles; sternum pale; legs pale at base, darker on tibiae, metatarsi, and tips of the femora; abdomen pale grayish, a spear-mark at base, and an irregular dark stripe more or less distinct on each upper side reaching from base to tip; venter with a broad brown stripe from base to spinnerets. Cephalothorax high, highest in the eye-region, concave from there to dorsal groove; P. M. E. hardly three times their diameter apart; a few curved bristles each side of eye-region. Legs as usual, spines very long; sternum plainly longer than broad. Abdomen about once and two-thirds as long as broad in ♀, contracted near tip, ending in a quite acute point; in a young ♂ it is two and a third times as long as broad.

Young specimens from La Chuparosa, Sierra Laguna, and Hermosillo; adult female from California.

PODOPHTHALMIDÆ.

265. *Podophthalma*, sp.?—Several broken specimens without locality.

ATTIDÆ.

266. *Phidippus arizonensis* Peck.—Two females from Agua Caliente, and one from Tepic, belong to this species. The abdomen is red above, a basal white band, a median white spot followed by a black stripe to the tip, an interrupted, curved white band, and two spots before the tip, and an oblique white band each side, near the middle.

267. *Phidippus mexicanus* Peck.

♀ 11 mm. long; ceph. 5 mm. long, red-brown, clothed with white hairs on the sides; a tuft of black bristles above eyes of the second row; palpi and clypeus with long white hair; mandibles brilliant green; legs red-brown, blackish at ends of joints, tarsi pale, clothed with white hair, more blackish under tip of tibia I; abdomen with a broad black field on venter, margined with pale, above rather reddish around sides, black above, a basal white band, a large median triangular white spot, and behind it two pairs of transverse white spots; IV metatarsi have a spine near middle.

Two females from Tepic and one from El Taste, with shrunken abdomens, appear to belong here.

268. *Phidippus georgii* Peck.

PLATE XVII, FIG. 23.

Several specimens from Tepic. The dark median stripe is really a slightly paler folium margined with black; metatarsi IV have two spines near the middle.

269. *Phidippus nigropilosus*, sp. nov.

PLATE XVII, FIG. 20.

Length 12 mm.; ceph. 5.7 mm. long, broad 4.4 mm. Dark red-brown all over, almost black, especially on the under side; the tarsi pale and palpi lighter reddish, clothed with long black hair, denser on tibia I; some white hair over A. M. E.; some iridescent scales on eye-region and on the dorsum of abdomen. Anterior row of eyes curved; S. E. hardly half their diameter from the M. E.; mandibles transversely rugose toward tip; metatarsus IV spined near middle, no spines above on tibia IV.

Two females from Tepic, Nov.

270. *Phidippus funebris*, sp. nov.

PLATE XVII, FIG. 22.

Length ♀ 13.5 mm.; ceph. 5.3 mm. long, broad 4.2 mm. Cephalothorax, mandibles, sternum, and legs dark red-brown, tarsi pale; abdomen black, clothed with black hairs, some small white spots on the sides and four pairs above; dorsum with iridescent scales, also some on eye-region; venter black,

hardly paler on sides, the black hair is very dense under tibia I; metatarsi IV rather long, a spine before middle. In ♂ (10.5 mm. long) the mandibles are large, porrect, divergent, and polished, the fang is undulate and has a bifid tooth near middle; two large teeth on base of mandibles, and a blunt process above and below near base of fang. The anterior legs are longer than in the ♀ and more densely black haired.

One pair from Tepic, Oct. Known by black hair, dark color, and spots on sides of abdomen.

271. *Phidippus fraternus*, sp. nov.

PLATE XVII, FIG. 24.

Length ♀ 11-12 mm.; ceph. 5 mm. long, broad 4 mm. Cephalothorax red-brown, sides clothed with white hair, blackish on eye-region, with some iridescent scales; clypeus and palpi long, white haired; mandibles reddish, polished; sternum red-brown; legs reddish, tarsi pale, anterior pair darkest, most of joints darker at tips, all with long white hair, except black at tip of tibia I; abdomen clothed above with bright bronze or coppery scales, surrounded by a white band (in some specimens reddish) and three pairs of white dots above; venter with three dark lines; hind metatarsi with one spine in front before tip, none below. The ♂ is 8.5 mm. long; the cephalothorax, mandibles, and legs dark red-brown or almost blackish; abdomen dark reddish, with iridescent scales above and a narrow white stripe around sides (sometimes broken toward spinnerets into spots) and three pairs of white dots above. Mandibles long, scarcely porrect, a tooth below at base; fang short, evenly curved.

Various specimens from El Taste, Sierra San Nicolas, Sierra San Lazaro, and a large male from Magdalena Island.

272. *Phidippus disjunctus*, sp. nov.

PLATE XVII, FIG. 21.

Length ♀ 13.5 mm.; ceph. 5.8 mm. long, broad 4.6 mm. Cephalothorax red-brown, blackish in eye-region, with iridescent scales, white scales on the sides; clypeus and pale palpi fringed with long white hair; mandibles reddish. Legs pale red-brown, blackish at ends of tibiae, tarsi and metatarsi all pale, clothed with white hair and black bristles, black hair under tibia I; sternum dark red-brown; abdomen brown, a dark median stripe on venter, above with a white band around base, behind its ends is a large oval spot, and behind this an elongate spot with projections upward, four pairs of small dots in the middle field, all spots more or less distinctly margined with black, the

middle field clothed with iridescent scales. Cephalothorax large and heavy; anterior eye-row curved; S. E. distant from M. E.; eyes of second row about twice as far from dorsal as from lateral eyes; metatarsi IV spined only at tip, no spines above on tibia IV.

Two females from Tepic, Oct. In markings it is very similar to *Philæus multicolor*, but its large size at once separates it.

273. *Philæus multicolor* Hentz.—One female from Tepic, Oct.

274. *Philæus limbatus*, sp. nov.

PLATE XVII, FIG. 17.

Length ♂ 4.5 mm. Cephalothorax black on sides and behind, above clothed with iridescent greenish scales, a white stripe starts from the lateral eyes and extends to the thoracic region; mandibles dark red-brown; legs brown, posterior coxæ, intermediate metatarsi, and all tarsi pale; sternum brown; abdomen above brown, clothed with iridescent greenish scales, a white stripe around base and on the sides, not reaching to the tip, below this the sides are black; venter brown, except base which is paler. Mandibles long, porrect, diverging, armed toward base above with a spine and near tip below a still larger one; fang long and curved at base. Legs short; first pair stoutest and longest; three pairs of spines under tibia I toward tip, and two pairs under metatarsi I; coxæ I separated by width of lip; tarsus of ♂ palpus truncate at tip and clothed with white hair.

Three males; Tepic, Nov.

275. *Philæus trimaculatus*, sp. nov.

PLATE XVII, FIG. 18.

Length ♂ 5.2 mm. Cephalothorax black, a spot in front of each dorsal eye, a median spot behind, and the posterior sides narrowly white, some iridescent scales in eye-region; mandibles and anterior legs wholly red-brown, a white stripe above on palpus; coxæ II, III, and IV, bases of femora III and IV, and intermediate tarsi pale, rest red-brown, in ♀ the posterior tibiæ paler in the middle; sternum red-brown; abdomen brown, clothed with greenish scales above, a basal curved white band, in front of which the abdomen is black, a median and a subapical pair of transverse white spots, and two white dots in front; venter rather paler on the sides, in the ♀ the white spots

are edged with black, and sometimes nearly meet above; some white scales on legs, anterior pair of ♂ with long and short black hair. Mandibles of ♂ vertical, unarmed, fang short; coxæ I separated by fully width of labium; leg I much the stoutest and longest, three pairs of spines under tibia, two under metatarsi.

One male and several females, which, however, are scarcely adult, from Tepic, Oct.

276. *Philæus consimilis*, sp. nov.

PLATE XVII, FIG. 13.

Length ♂ 5.2 mm. Very similar to *P. limbatus*, but larger and rather paler. Cephalothorax clothed with iridescent scales, and abdomen also as in that species, with a white band around sides; metatarsus I is pale at base (in *limbatus* wholly black), and the metatarsus IV is wholly pale (in *limbatus* wholly black). The ♂ mandibles are long and divergent as in *P. limbatus*, and armed with a tooth below at tip and a smaller one near base, the fang straight. The ♀, 6.5 mm. long, has a red-brown cephalothorax, with iridescent scales. Abdomen brown above, clothed with iridescent scales, a white line around base, below this the sides are black, rather paler in the venter; legs red-brown; the distal joints paler, often darker at the tip.

Two pairs from Coral de Piedras.

277. *Dynamius opimus* Peck.

PLATE XVII, FIG. 25.

One specimen from Tepic.

278. *Helorus perditus*, sp. nov.

PLATE XVII, FIG. 19.

Length ♂ 7 mm.; ceph. 3.5 mm. long, broad 2.3 mm. The cephalothorax is red-brown, blackish in the eye-region, a white stripe from lateral eyes back just below dorsal eyes, then extending across to meet the one from the other side; mandibles light red-brown; palpi black haired on femora and tarsus, on patella thick white hair, very long at tip; legs yellow-brown, rather blackish on femur I, tarsi pale; sternum yellowish; abdomen black, a white band at base and an indistinct pale median stripe formed of chevrons, and a white dot each side of it toward apex; venter pale, with black dots. The eyes of second row are about one-half way between dorsal and lateral eyes. The third legs are as long as the fourth; posterior metatarsi spined to base. The ♂ palpi

are small; the tarsus shorter than the tibia. The ♀ is similar to the ♂, 8 mm. long. The abdomen is paler and the median stripe is margined with black, and there are no dots on the venter; the epigynum is very small.

One pair from Tepic, Nov.

279. *Dendryphantes nubilus* Hentz.—Many specimens from Tepic.

280. *Dendryphantes retarius* Hentz.—Several specimens from Tepic and Sierra San Lazaro, Sept.

281. *Dendryphantes vitis* Cock.—A few specimens from San José del Cabo.

282. *Dendryphantes*, sp.?—One female from Tepic. Abdomen pale above, but with iridescent scales, blackish on the sides; cephalothorax, sternum, and legs red-brown; hind pairs paler.

283. *Pachomius niger*, sp. nov.

PLATE XVII, FIG. 15.

Length ♀ 6 mm.; ceph. 2.7 mm. long, broad 1.8 mm. Cephalothorax dark red-brown, black on eye-region; mandibles and sternum dark red-brown; legs paler red-brown, tarsi yellowish; abdomen black; epigynum reddish. Cephalothorax long and flat; abdomen slender, broadest in middle, tapering both ways; legs short, first pair much the stoutest, metatarsus IV with two spines below near middle.

One example from San José del Cabo.

284. *Marptusa californica* Peck.—One specimen from San José del Cabo.

285. *Marptusa familiaris* Hentz.—A few specimens from Minititlan.

286. *Marptusa melanognatha* Luc.—Many specimens; San José del Cabo, El Taste, Minititlan, Coral de Piedras, and Hermosillo.

287. *Cyrba* sp.?

Length 3.5 mm. (young ♂). Blackish; palpi pale; first legs, except tarsi, black; others pale, except the femora black, and a black line on each side of metatarsi IV. Abdomen with a basal band reaching to posterior third, above two parallel stripes to posterior third, and behind two oblique spots. Cephalothorax with a white seam, and behind eye-region a white band.

One specimen from Tepic. Allied to *C. teniola*.

288. *Cyrene delecta* Peck.—Several young specimens from Tepic.

289. *Attus* sp.?

Length 3.8 mm. (immature). Black, with white palpi, a pale band on the middle of the hind tibiae; coxae pale; basal band to abdomen, two oblique stripes on the anterior sides, the front one curving backward, the other obliquely forward, and side of cephalothorax narrowly white.

One specimen from Tepic.

290. *Attus peninsulanus*, sp. nov.

PLATE XVII, FIG. 16.

Length ♂ 4.6 mm.; ceph. 2.3 mm. long, 1.8 mm. broad. The cephalothorax yellowish, black on eye-region, a dark stripe on each posterior side margin, and rather darker in the middle behind; clypeus and mandibles light red-brown; legs pale, first pair infuscated; sternum pale. Abdomen pale, sides dark, a median black stripe above, wider near middle, then suddenly narrowed and deeply serrate behind; venter pale, usually with some dark dots; one specimen has the abdomen wholly infuscated. First row of eyes curved; S. E. fully one-half the size of the M. E., and well separated from them. Cephalothorax moderately high, rather highest at dorsal eyes; eye-region equally wide in front and behind. First pair of legs longest; first coxae separated by full width of lip; fourth metatarsi spined to base. Tibia of ♂ palpus has a tooth on inner side at base and a long projection at tip on outside. An immature ♀ is like the ♂, but first pair of legs paler.

Several specimens; Sierra San Lazaro, Sept., and two from La Chuparosa.

291. *Euophrys obscurus*, sp. nov.

PLATE XVII, FIG. 14.

Length 6 mm.; ceph. 2.4 mm. long, broad 1.8 mm. Cephalothorax red-brown, darker on eye-region, a pale stripe each side from dorsal eye back to the hind margin; clypeus dark, with pale hair; palpi banded; mandibles pale; legs pale, with dark rings at tips of femora and patellæ, and bases and tips of tibiæ and metatarsi; sternum pale. Abdomen brown above and on the sides, some indistinct pale spots and two larger marks just before the spinnerets; venter paler, with dark dots. Cephalothorax rather low and flat. Abdomen somewhat depressed. Third leg a little shorter than fourth; fourth metatarsi spined to base. S. E. more than one-half as large as M. E.; third row almost as wide as cephalothorax at that point.

Several female specimens from Coral de Piedras and La Chuparosa.

292. *Habrocestum cæcatum* Hentz.?—One pair (the male immature) from Tepic appear to belong to this species.

293. *Habrocestum conjunctus*, sp. nov.

PLATE XVII, FIG. 8.

Length ♂ 4.5 mm.; ceph. 2.4 mm. long, broad 1.8 mm. The cephalothorax is pale; eye-region black, red hairs above first eye-row and on eye-region; clypeus pale, a black stripe each side extends back from dorsal eyes toward the hind margin, the side margins white, a long median black triangle behind; mandibles pale; palpi pale; sternum margined with black. Legs pale, a crest of white hair on femur, patella, and tibia I, black beneath on tibia I, hind pairs with tips of joints darker. Abdomen pale, a long black stripe each side, connected at tip, a dark spot at base between them, sometimes wholly dark at base, sides black; venter with three indistinct dark spots. Third pair of legs much the longest; patella simple. The ♀ is 6 mm. long. Cephalothorax red-brown, darkest on eye-region. Abdomen brown above, with oblique white stripes each side, two spots in the middle and some chevrons behind; venter with three indistinct dark lines. Legs pale; sternum margined with black.

A few examples from San José del Cabo and Magdalena Island.

294. *Habrocestum divaricatum*, sp. nov.

PLATE XVII, FIG. 7.

Length δ 5 mm.; ceph. 2.5 mm. long, broad 1.8 mm. The cephalothorax is pale; eye-region and clypeus black, a white spot under each lateral eye, a median black triangle from posterior margin, and each posterior side narrowly black; mandibles black; palpi black, some white hair on the patellæ; legs pale, anterior femora infuscated, posterior pairs banded, dark lines on the tibiæ; sternum pale; abdomen pale, two dark stripes above, connected near spinnerets, not reaching front margin; venter black on basal part and on sides, pale behind, with a median black T mark. Third pair of legs much the longest; patella prolonged above in a reddish point. What I take to be the ♀ is paler than the δ , the cephalothorax, however, marked the same. Legs all pale; abdomen light brownish, with oblique pale stripes each side and a median one in posterior part; venter with three dark lines; it is 6 mm. long.

Several specimens from Sierra San Lazaro, Sept.

295. *Habrocestum aztecanum*, sp. nov.

PLATE XVII, FIG. 9.

Length δ 5 mm. Cephalothorax pale; eye-region dark, crossed by fine white band in front, dorsal eyes on black spots, below them a white spot; eyes of second row surrounded by white, a long median triangular black spot behind, and an oblong spot each side; clypeus white haired; legs pale, striped with black except tarsi; the mandibles white, with a long black spot each side at base; sternum and coxæ wholly pale; abdomen with two large dark spots at base, and behind a large triangular black spot enclosing a small white triangle, sides black; venter with a black median stripe. Usual structure of the genus; patella of leg III enlarged and prolonged above; one spine above on tibia III, two above on metatarsus III. A ♀ , possibly of this species, is 6 mm. long, and looks much like *H. cristatum* Hentz. It has dark cephalothorax, with white hair on sides, and indistinct marks on the brown abdomen.

A few specimens from Tepic, Nov.

296. *Habrocestum dorsalis*, sp. nov.

PLATE XVII, FIG. 12.

Length δ 5 mm.; ceph. 2.5 mm. long, broad 1.7 mm. Cephalothorax dark brown, scarcely darker in the eye-region, clothed with white scales and long black bristles, clypeus dark; mandibles red-brown; palpi, sternum, and legs dirty yellowish, with some white scales and long hairs; abdomen brown, paler beneath, with white scales and long hairs, a narrow white median stripe from base to apex, its posterior part broken into spots, some small spots on the

sides. Cephalothorax longer than usual; posterior eye-row as broad as the anterior row. Third pair of legs plainly longer than the fourth; patella III simple.

One male; Hermosillo.

297. *Habrocestum cinctipes*, sp. nov.

PLATE XVII, FIG. II.

Length ♀ 6 mm.; ceph. 2.3 mm. long, broad 1.7 mm. Cephalothorax dark red-brown, clothed with white hairs and black bristles, latter very numerous in the eye-region; clypeus dark, with long white hair on the margin; palpi pale, yellow-haired; anterior pair of legs dark, pale at bases of patellæ, tibiæ, and metatarsi, other pairs pale, all joints dark at bases and tips; sternum dark; abdomen light gray, a large long brown stripe above with projections on its sides and containing some pale chevrons behind; sides and venter light gray. Cephalothorax rather slender. Abdomen high and convex, pointed behind, truncate at base.

One specimen from Sierra San Lazaro, Sept. It is separated from the other species by its banded legs and by the narrowness of the abdominal markings.

298. *Habrocestum dubitatum*, sp. nov.

PLATE XVII, FIG. IO.

Length ♀ 7 mm.; ceph. 2.9 mm. long, broad 2 mm. Cephalothorax red-brown, obscure, darker in the eye-region, clothed with whitish hair and blackish bristles; clypeus white, with long white hair; mandibles black; palpi and legs and sternum pale; abdomen pale on sides and below, above mostly brownish, with a median white stripe behind and two side spots.

One example; San José del Cabo.

299. *Habrocestum*, sp.?—Two small specimens (females) apparently of different species; one from Hermosillo, with pale legs; it cannot be the female of *H. dorsalis*, as it has a much broader cephalothorax and looks quite different. The other with dark legs is from Orizaba. Both are obscurely marked and unknown to me and are better not described.

300. *Zygoballus parvus* Hentz.—A few female specimens from Tepic.

PSEUDOSCORPIONIDÆ.

301. *Chelanops*, sp.?—One specimen probably new. It has simple hairs and is related to *C. oblongus*, but has pale palpi. Hermosillo.

302. *Ideoroncus mexicanus*, sp. nov.

Length 2.4 mm. Cephalothorax once and one-half longer than broad, a little broader behind than in front; one eye each side; mandibles of moderate size, a hair-like stylet. Palpi quite long, trochanter swollen behind; femur rather longer than cephalothorax, nearly cylindrical; tibia one-fourth shorter, short pedicellate, but little swollen either side and no broader than femur; hand evenly convex outside, very strongly so on inner margin, being at one place twice as broad as femur; fingers slender, longer than hand, slightly curved; body narrow, widest in the middle; segments undivided.

One specimen; San Miguel de Horcasitas. Differs from *I. obscurus* in smaller size, more slender tibia, and much longer fingers.

303. *Chelifer scabrisculus* Sim.—One example; Sonora.

PEDIPALPI.

304. *Buthus carolinianus* Beauv.—A few specimens without locality, probably from eastern Mexico.

305. *Thelyphonus giganteus* Latr.—A few from Mexico, without farther locality.

306. *Admetus asperatipes* Wood.—Many examples from San José del Cabo and Sierra San Lazaro, March and Sept.

307. *Admetus coronatus* Butler.—Two from Mazatlan, Nov.

SOLPUGIDA.

308. *Datames formidabilis* Sim.—A number of specimens of this large species from San José del Cabo and Sierra San Lazaro, Sept.

309. *Datames putnamii*, sp. nov.

PLATE XVII, FIG. 29.

Length ♂ 22-24 mm. (exclusive of mandibles); mandibles 5 mm. long; upper finger 5.5 mm. long; head 6 mm. broad; tibia of palpus 7.5 mm. long. Head and mandibles reddish yellow, former margined with black in front, fang red-brown; abdomen above dull blackish or purplish, hardly darker in the middle, paler beneath; legs and palpi pale yellowish, tips of latter scarcely darker. Head broader than long, straight in front; eyes separated by nearly their diameter; mandibles of the usual shape, upper finger unarmed, lower with a large tooth toward the base, and a small one just beyond; between the two fingers, on the fond of the jaw, there are two rows of three teeth each, and above these two little denticles. Legs and palpi moderately hairy and spined as usual; there are no small conical spines on the metatarsi of palpi, but long spines on the tibiae; on the middle of the hind margin of the fourth ventral segment there are four short stiff spine-like appendages (not in ♀). Aside from sexual differences, the ♀ is similar to the male, except larger.

Several specimens from Sierra San Lazaro, Sept., and San José del Cabo, Oct. This species differs from *D. girardii* in pale legs, head, and mandibles, in lacking a tubercle at the base above on upper finger of mandible, and in lacking conical spines on the metatarsus of palpus; the armature of the mandibles is, however, nearly the same, but the small teeth on the lower finger are almost invisible, the tip of this finger is not so curved, nor is it indented below as in *D. girardii*.

310. *Datames*, sp.?—One pair from San José del Cabo appear to belong to a different species than *D. formidabilis*, although quite similar; yet additional material would, I think, be necessary to decide the question.

311. *Cleobis peninsulanus*, sp. nov.

PLATE XVII, FIG. 30.

Length 14 mm.; head 3.8 mm. long, broad 4.2 mm.; mandibles 4.2 mm. long (including upper finger); tibia of palpus 5 mm. long. Cephalothorax and mandibles yellowish, the tips of the fingers red-brown; legs and palpi pale yellowish, the palpi with tibia (except at extreme base and tip) reddish brown, and the metatarsi and tarsi entirely reddish brown; abdomen light

gray, with a darker light chocolate brown stripe, most distinct on the margins and on the median line. Head broader than long, anterior margin retreating each side from the eyes, which are fully their diameter apart, median groove plain, only short hairs on the head. Mandibles long and stout, with bristles of moderate length; both fingers much curved at the tip, the upper one with several small teeth, the lower with two larger teeth and a small one between them; on the upper finger above, near base, is an elongate elevation or ridge. Palpus clothed with short fine hair, the tibia plainly enlarged before tip; legs as usual, with short hairs and bristles; the triangular piece at base of venter shows a narrow median groove on its posterior half.

Several specimens from San José del Cabo, and one from Hermosillo.

312. *Cleobis hirsuta*, sp. nov.

PLATE XVII, FIG. 31.

Length 11 mm.; head 2.7 mm. long, broad 2.8 mm.; mandibles (including finger) 3 mm. long; tibia of palpus 5 mm. long. Cephalothorax pale yellowish, rather reddish on the sides, leaving a pale central diamond-shaped figure; eyes on black spots; mandibles pale yellowish, a paler stripe above, fingers reddish at tips; palpi rather yellow brownish on all except the basal joint. Legs and abdomen pale, the latter with a median light brown stripe above. Head about as broad as long, the front margin recedes each side from the eyes, the latter much more than their diameter apart, the median groove distinct. Mandibles longer than head; fingers short, the upper one is emarginate above and also externally, below with two small teeth and some minute denticles toward the base; the lower finger has two rather large teeth; both of the fingers strongly curved at tip. The palpi, legs, and abdomen are as usual; the body is more hairy than usual, and on the appendages the hairs are extremely long, giving the creature a somewhat hoary appearance.

One specimen from San Miguel de Horcasitas. Readily known by the curious shape of the upper finger of the mandibles and the long hair.

ACARINA.

313. *Trombidium peninsulanus*, sp. nov.

Length 3.5 mm. Red; body somewhat pyriform, flat above, broadest in front, concave each side near middle, slightly concave in front, broadly rounded or even a little emarginate behind with several pairs of round impressions above. Body clothed above with short dense erect nearly clavate

hairs, appressed and not clavate on legs and venter. Legs very short, fourth pair longest, scarcely as long as body; last joint of leg I just about equal to penultimate; palpi short; second joint swollen above, clothed with long hair; third a little longer than broad; fourth short, tipped with a stout claw; thumb longer than claw, slender, scarcely clavate, and nearly bare.

Several from La Chuparosa and Sierra San Nicolas, Sept.

314. *Rhyncolophus echinatus*, sp. nov.

Length 3.2 mm.; broad 2.3 mm. General color dull blackish. Body short, broadly rounded in front and behind; dorsal groove enlarged in the middle, does not reach middle of dorsum; two eyes each side, frontal tubercle slender capitate. Legs thick and short, not as long as body is broad; broad and dense scopulas under all tarsi; palpi very small and slender, pale colored. Body and legs clothed above with many black, appressed, curved, short, stiff, pointed, roughened bristles or spines, above on the body are some black, scattered, erect, longer, clavate, roughened bristles, beneath the bristles are smaller.

One example from San José del Cabo.

315. *Rhyncolophus pedatus*, sp. nov.

Length 2-2.8 mm.; tibia IV 3.5 mm. Wholly pale yellowish. Body short and broad, broadly rounded behind, dorsal groove short, enlarged at end, not reaching to end of first third of dorsum; two eyes each side; mouth-parts short, rapidly tapering, seen from side there is a short tubercle above; palpi of moderate size, the femora enlarged toward tip, the tibia smaller, about half as long, the claw about as long as the thumb. The body bears above scattered short stiff, nearly erect bristles that are as large at tip as elsewhere and slightly roughened. The legs are extremely long and slender; the tarsi swollen and furnished with scopulas; the other joints have many stiff serrate spine-like hairs; the venter is clothed with many fine hairs.

Three specimens; Hermosillo.

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OF
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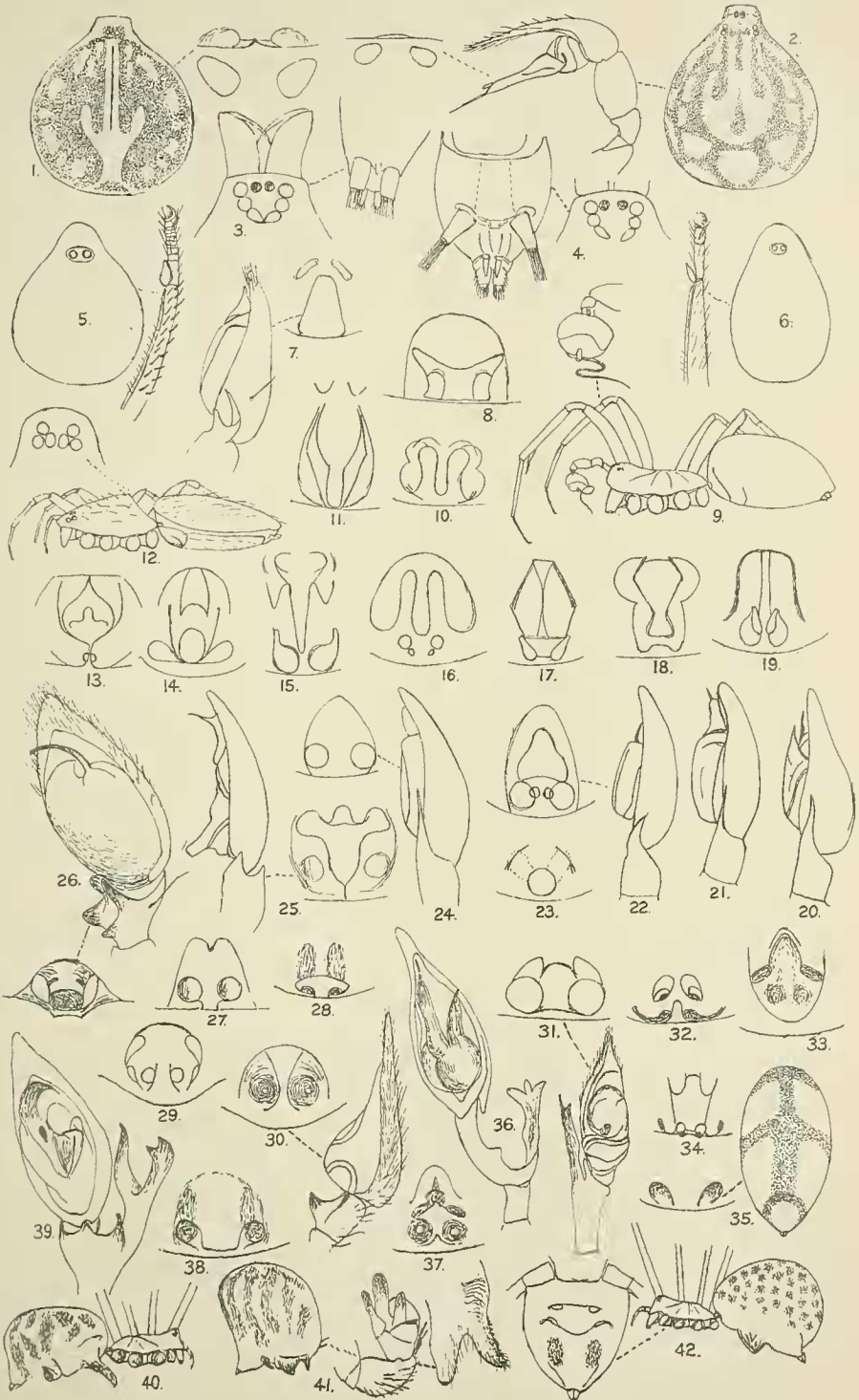
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<i>peninsulanus</i>	266	<i>fidelis</i>	218
<i>Oonopidae</i>	211	<i>gentilis</i>	218, 219
<i>Ordgarius bisaccatus</i>	251	<i>grisea</i>	217
<i>conigerus</i>	251	<i>indecisa</i>	220
<i>corpulentus</i>	251	<i>mexicana</i>	217
<i>obesus</i>	250	<i>peninsulana</i>	217
<i>Oxyopes acutus</i>	279	<i>valida</i>	219
		<i>Pseudoscorpionidae</i>	289
		<i>Psilochorus minutus</i>	213

RHYNCOLOPHUS echinatus	292	Theridium elevatum	237
pedatus	292	fordum	236
Runcinia	264	frondeum	236
parva	264	rufipes	236
SCYTODES bajula	209	rupicola	236
fusca	209	spirale	236
lineatipes	209	studiosum	236
longipes	210	tepidariorum	236
mexicanus	210	unimaculatum	236
perfecta	210	Theridula triangularis	237
thoracica	210	Thomisidæ	258
Scytodidæ	209	Tmarus	265
<i>Segestria canites</i>	209	magniceps	264
Selenops	267	separatus	264
aissa	206	Tmeticus denticulatus	243
debilis	267	incertus	242
morosa	268	tridentatus	242
Singa mœsta	256	Trachelas mexicana	226
Solpugida	289	parvulus	225
Sparassidæ	266	speciosa	225
Spintharus flavidus	237	tranquilla	226
Synæma	261	Trochosa cinerea	272
æquinoctialis	261	mexicana	272
Syspira longipes	227	parva	272
tigrina	226	Trombidium peninsulanus	291
TAMA mexicana	211	<i>Turckheimia diversa</i>	256
Tegenaria californica	230	ULOBORIDÆ	234
derhami	230	Uloborus albineus	235
modesta	230	diversus	234
obscura	230	formosus	234
Tetragnatha atriceps	248	plumipes	234
convexa	247	VIXIA infumata	256
fraterna	247	XYSTICUS apertus	259
gallator	246, 247, 248	<i>bimaculatus</i>	259, 260
intermedia	247	curtus	260
mandibulata	246	discursans	259, 260
peninsulana	246	fissilis	258
Tetragnathidæ	246	4-lineatus	258
Teutana grossa	238	montanensis	260
zonata	238	orizaba	260
Tbalamia parietalis	210	<i>pulverulentus</i>	260
Thanatus peninsulanus	265	ZILLA californica	255
rubicuudus	206	Zimiris griseus	214
Thargalia crocatus	228	pubescens	214
dorsata	228	Zodariidæ	214
gracilis	229	Zorocrates badius	214
mexicana	228	fuscus	214
venusta	227	pictus	214
Thelyphonus giganteus	289	Zoropsidæ	214
Theraphosidæ	208	Zygoballus parvus	288
Theridiidæ	236		
Theridium albonotatum	236		
confraternus	236		

EXPLANATION OF PLATE XIII.

(All new species.)

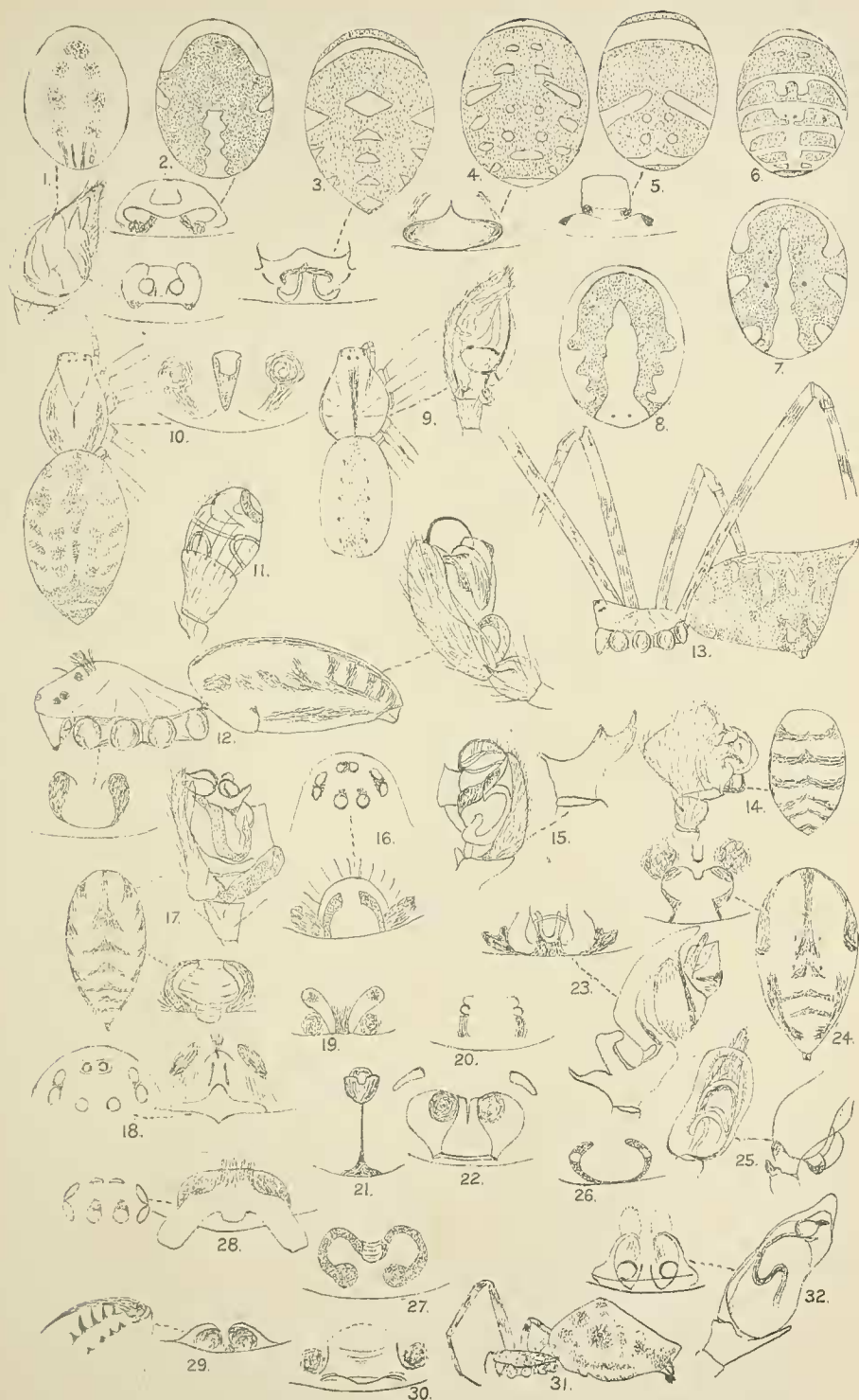
- Fig. 1. *Scytodes mexicanus*.
2. " *perfecta*.
3. *Zimiris pubescens*.
4. " *griseus*.
5. *Nops sternalis*.
6. " *ovalis*.
7. *Drassodes perditus*.
8. *Drassus singularis*.
9. *Plectreuryx bicolor*.
10. *Leptodrassus incertus*.
11. *Drassus orizaba*.
12. *Gamasomorpha rufa*.
13. *Gnaphosa distincta*.
14. " *decepta*.
15. " *abnormis*.
16. *Prothesima peninsulana*.
17. " *gentilis*.
18. " *mexicana*.
19. " *fidelis*.
20. " *indecisa*.
21. " *directa*.
22. " *completa*.
23. *Cesonia trivittata*.
24. " *mexicana*.
25. *Megamyrmeleon californicum*.
26. *Corinna peninsulana*.
27. *Trachelas mexicana*.
28. " *parvulus*.
29. *Thargalia gracilis*.
30. " *dorsata*.
31. *Anyphaena futilis*.
32. *Gayenna minuta*.
33. *Prothesima grisea*.
34. *Gayenna ignava*.
35. *Thargalia venusta*.
36. *Chiracanthium parvulum*.
37. *Gayenna orizaba*.
38. *Thargalia mexicana*.
39. *Clubiona complicata*.
40. *Physocylus mexicanus*.
41. " *cornutus*.
42. *Psilochorus minutus*.



EXPLANATION OF PLATE XIV.

(New species except Figs. 7 and 8.)

- Fig. 1. *Lithyphantes parvula*.
2. " *venusta*.
3. " *medialis*
4. " *punctulata*.
5. " *transversus*.
6. " *autumnalis*.
7. " *pulcher*.
8. " *pulcher*, var.
9. *Linyphia dorsalis*.
10. " *eiseni*.
11. *Theridium confraternus*.
12. *Acartauchenius insanus*.
13. *Chrysso splendida*.
14. *Bathyphantes transversus*.
15. *Ceratinopsis rosea*.
16. *Grammonota nigriceps*.
17. *Bathyphantes tragica*.
18. *Pocobletus mexicanus*.
19. *Dictyna avara*.
20. *Altella polita*.
21. *Tegenaria modesta*.
22. *Agalena peninsulana*.
23. *Amaurobius peninsulanus*.
24. *Grammonota gentilis*.
25. *Dictyna miniata*.
26. *Tegenaria obscura*.
27. *Cœlotes exaptus*.
28. *Tmeticus incertus*.
29. " *denticulatus*.
30. *Agalena orizaba*.
31. *Uloborus formosus*.
32. *Trachelas speciosa*.



EXPLANATION OF PLATE XV.

(New species, except Fig. 7.)

- Fig. 1. *Epeira perplexa*.
2. " *zilloides*.
3. *Singa mæsta*.
4. *Epeira singularis*.
5. " *caudata*.
6. *Larinia bellona*.
7. *Epeira detrimentosa*.
8. *Ordgarius corpulentus*.
9. " *obesus*.
10. *Tetragnatha convexa*.
11. " *fraterna*.
12. " *peninsulana*.
13. " *atriceps*.
14. " *intermedia*.
15. *Glenognatha minuta*.
16. *Eugnatha orizaba*.
17. *Uloborus diversus*.
18. " *albineus*.
19. *Azilia mexicana*.